

SAMSUNG

COLOR TELEVISION RECEIVER

Chassis : S15A
Model: CK1438VR5X/VWT CK2073XR5X/VWT
CK1448VR5X/BWT CK2173VR5X/BWT
CK2085VR5X/BWT CK20E3VR5X/NWT
CK2185VR5S/AWT

SERVICE *Manual*

COLOR TELEVISION RECEIVER



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1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.
2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.
3. Make sure that there are no cabinet openings through which people—particularly children—might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (Figure 1-1):
Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANIS C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).
5. With the unit completely reassembled, plug the AC line cord directly into the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

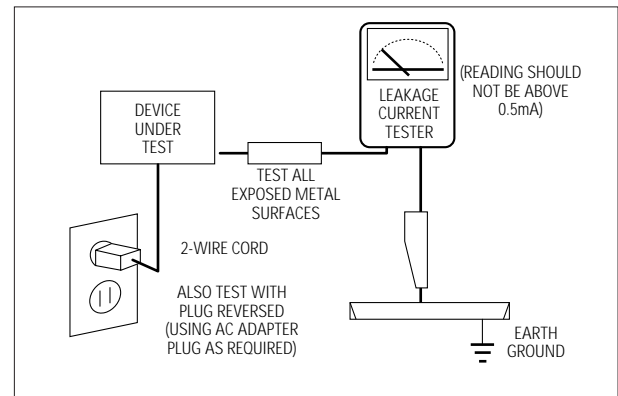


Fig. 1-1 AC Leakage Test



6. Antenna Cold Check:
With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong. Connect the other lead to the coaxial connector.
7. X-ray Limits:
The picture tube is especially designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original. Carefully reinstall the picture tube shields and mounting hardware; these also provide X-ray protection.
8. High Voltage Limits:
High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits. Correct operation of the X-ray protection circuits must be reconfirmed whenever they are serviced.
(X-ray protection circuits also may be called "horizontal disable" or "hold-down".)

Heed the high voltage limits. These include the X-ray Protection Specifications Label, and the Product Safety and X-ray Warning Note on the service data schematic.

1-1 Safety Precautions (Continued)

9. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.
10. Design Alteration Warning:
Never alter or add to the mechanical or electrical design of this unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.
11. Hot Chassis Warning:
Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.

To confirm that the AC power plug is inserted correctly, do the following: Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.
12. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, regardless of the AC plug polarity. These units can be safely serviced only if an isolation transformer inserted between the receiver and the power source.
13. Some TV chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulating material that must not be defeated or altered.
14. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards.
15. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.
16. Picture Tube Implosion Warning:
The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.
17. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.
18. Product Safety Notice:
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original—even if the replacement is rated for higher voltage, wattage, etc.

Components that are critical for safety are indicated in the circuit diagram by shading, () or ().
Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

1-2 Servicing Precautions

Warning1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

Warning2: An electrolytic capacitor installed with the wrong polarity might explode.

1. Servicing precautions are printed on the cabinet. Follow them.
2. Always unplug the unit's AC power cord from the AC power source before attempting to: (a) Remove or reinstall any component or assembly, (b) Disconnect an electrical plug or connector, (c) Connect a test component in parallel with an electrolytic capacitor.
3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.
5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.

The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
8. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

1. Some semiconductor (“solid state”) devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.
2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power—this is an electric shock precaution.)
3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.
4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.
5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.
6. Use only an anti-static solder removal device. Many solder removal devices are not rated as “anti-static”; these can accumulate sufficient electrical charge to damage ESDs.
7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
9. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

2. Specifications and IC Data

2-1 Specifications

Television System:

MODEL	SYSTEM
CI	PAL-I (UHF)
CII	PAL-I (VHF/UHF)
CX	PAL-B/G, SECAM-B/G
CK	PAL-B/G, D/K, SECAM-B/G, D/K
CW	PAL-B/G, D/K, SECAM-B/G, D/K, NT 4.43
CS	PAL-B/G, D/K, SECAM-B/G, D/K, NT4.43, NT3.58

Channels:

System Band	PAL/SECAM-B/G,I	PAL, SECAM- D/K	SECAM-K1, PAL-D	NTSC - M
VHF	2 - 12	1 - 13	2 - 9	2 - 13
UHF	21 - 69	21 - 69	13 - 57	14-69

Intermediate Frequencies (MHz) :

SYSTEM IF Carrier Frequency	PAL/ SECAM- B/G	PAL/SECAM-D/K, SECAM-K1	PAL - I	NTSC - M
Picture IF Carrier	38.90	38.90	38.90	38.90
Sound IF Carrier	33.40	32.40	32.90	34.40
Color Sub Carrier	34.47	34.47	34.47	35.32

Picture Tube:

14 Inch	A34KQV42X	Quick start, in-line-gun, Black stripe, 90°degree deflection
20 Inch	A48KRD82X(H)	
21 Inch	A51KQJ63X	

Power Requirements:

AC 100~260V, 50/60Hz

Antenna Input Impedance:

VHF, UHF : Telescopic dipole antenna (75 ohm unbalanced type)

Speaker Impedance

8 ohm, 5W+5W (Dual Type)
16 ohm, 3W (Monitor Type & Dual Type)

2-2 IC Line Up

Table 2-1 IC Line-Up			
Loc. No	Specification	Description	Remark
HC101	PAP103	IF PRE-AMP	
IC201	TDA8842 TDA8841	PAL/SECAM-B/G, D/K, NTSC PAL-B/G, D/K, NTSC	Philips
IC301	TDA8356	VERTICAL OUTPUT	
IC501	TDA6107Q	RGB DRIVE AMP	
IC601	TDA7056B	SOUND-AMP (3W x 1CH or 3W x 2CH)	
IC602	TDA7057AQ	SOUND-AMP (5W x 2CH)	Dual Type
IC801	KA3S0680RF	POWER IC (STR)	
IC802	KA7630	CUSTOM REGULATOR (5V, 8V)	
IC901	SZM173EA	W/O TTX, English/French/Arabian	Zilog (Non TTX)
	SZM173AR	W/O TTX, English/Arabian	
	SZM173EV	W/O TTX, English/Vietnamese/Indonesian/Malay	
	SZM173EC	W/O TTX, English/Chinese	
	SZM173ET	W/O TTX, English/Thai	
	SZM173EW	W/O TTX, English/German/French/Dutch/Italian/Spanish, Swedish/Yugo/Greek/Croatian	
	SZM173EE	W/O TTX, English/Romanian/Hungarian/Polish/Czech/Bulgarian	
	SZM173ER	W/O TTX, English/Russian	Philips (TTX)
	SPM175EE	TTX, West : English/German/French/Dutch/Italian/Spanish/Swedish East : English/Czech/Croatian/Romanian/Hungarian/Polish	
	SPM175E	TTX, English/French/Swiss	
	SPM175ER	TTX, English/Russian/Bulgarian	
	SPM175EP	TTX, English/Iranian	
	SPM175EA	TTX, English/French/Arabian	
	SPM175EG	TTX, English/Greek/Yugo	
IC902	24C04/KS24C040	EEPROM	
PC801	TCET1108 / LTV817B	PHOTO COUPLER	

2-3 Semiconductor Base Diagrams

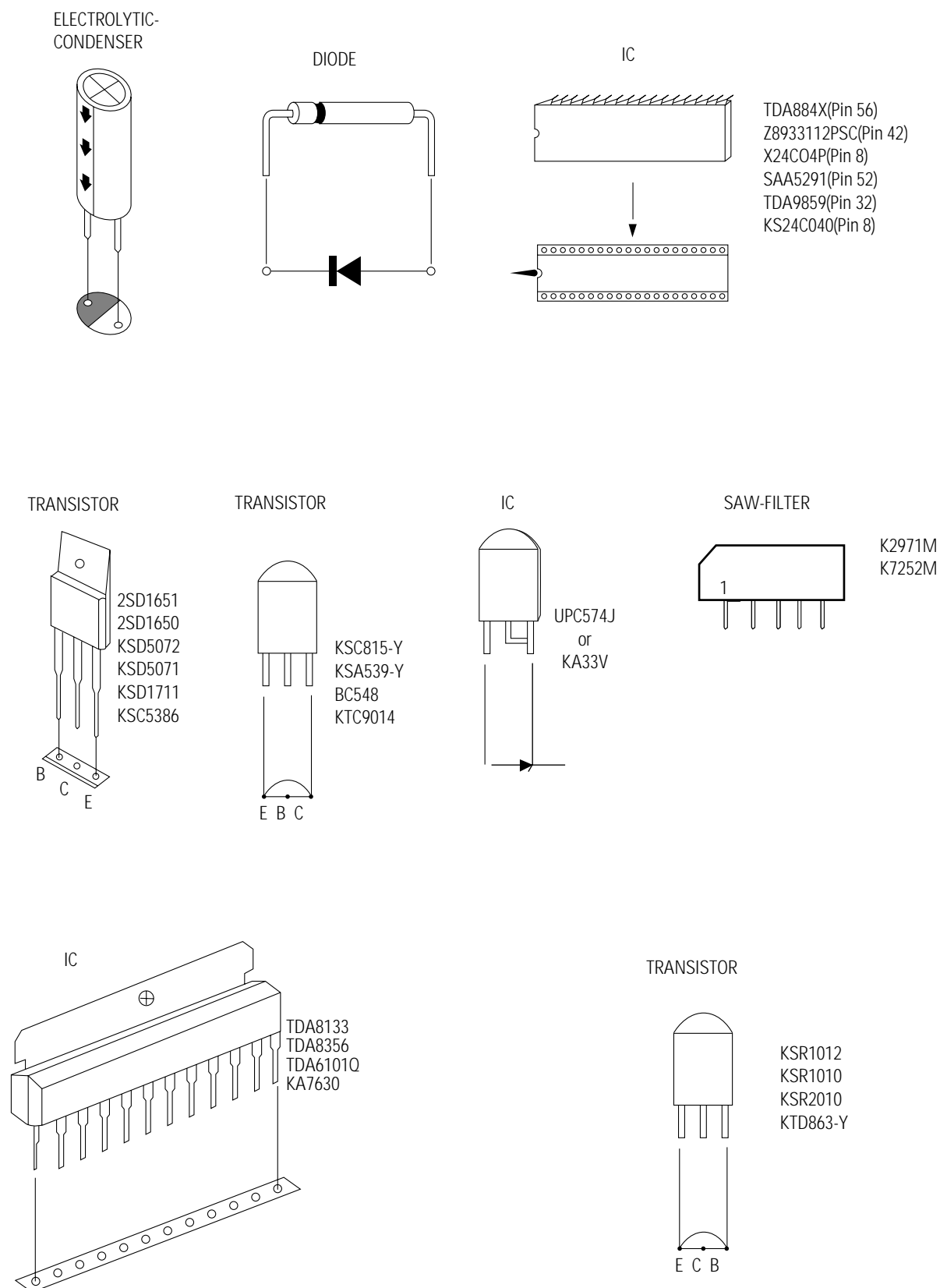
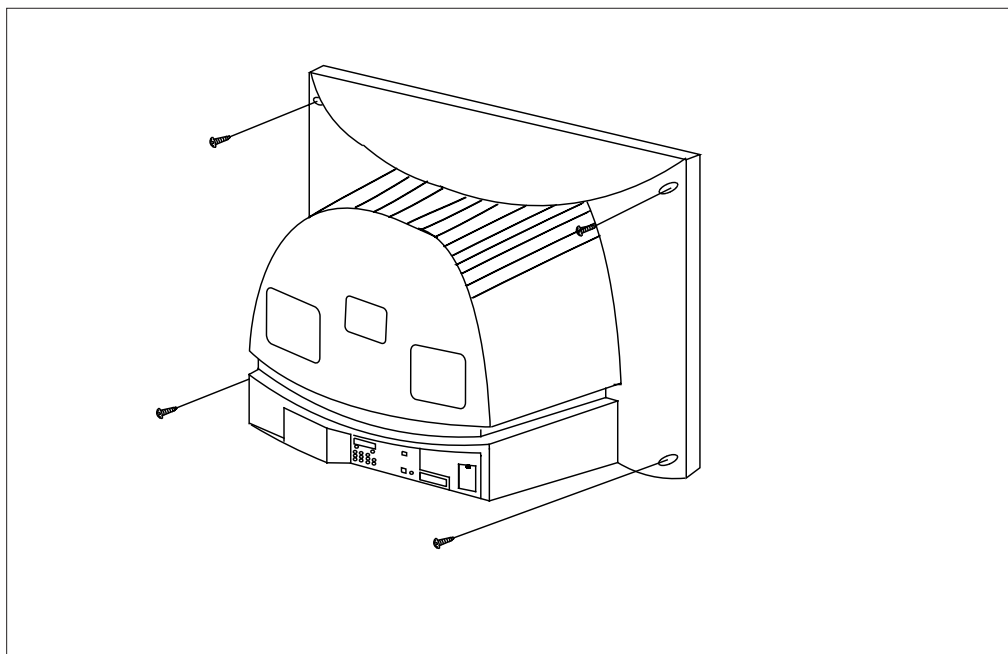


Fig. 2-1 Semiconductor Base Diagrams

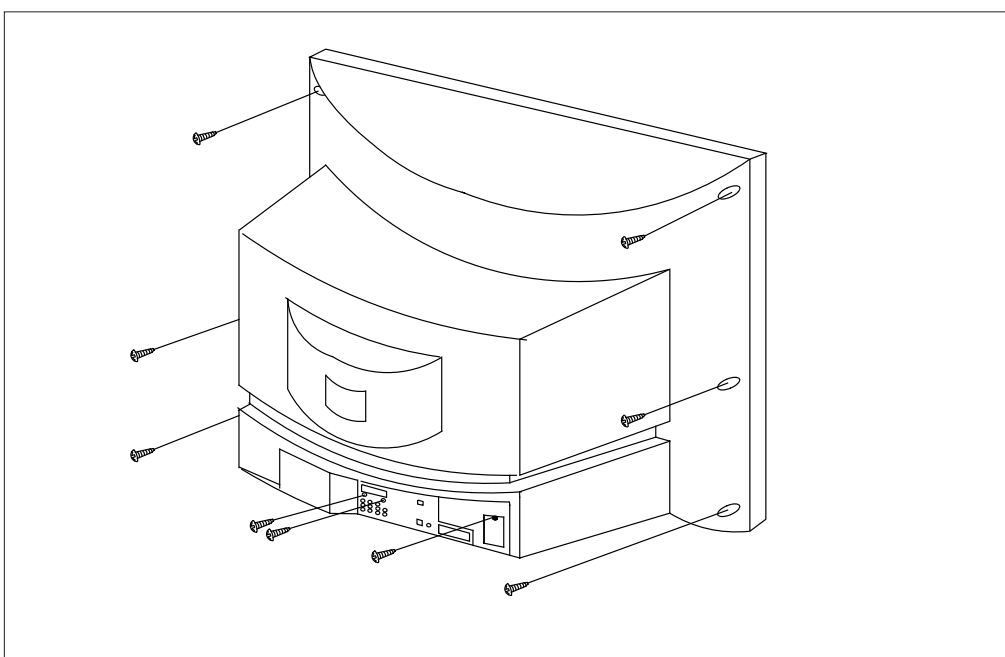
MEMO

3. Disassembly and Reassembly

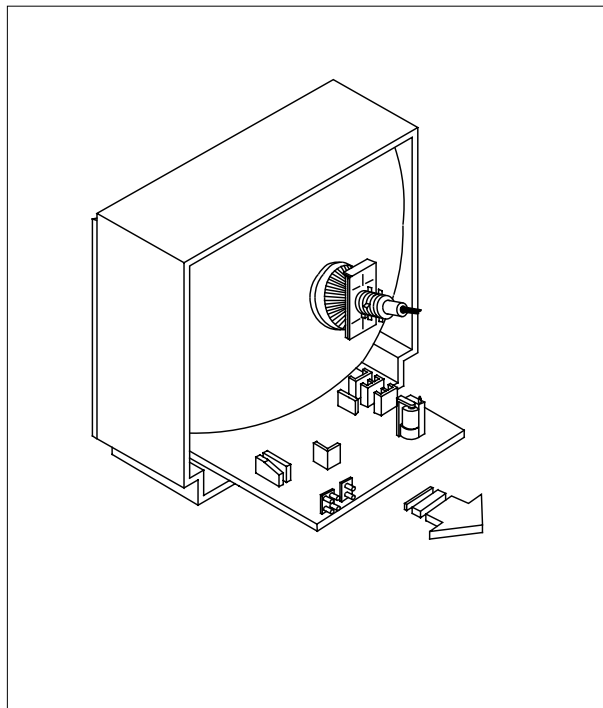
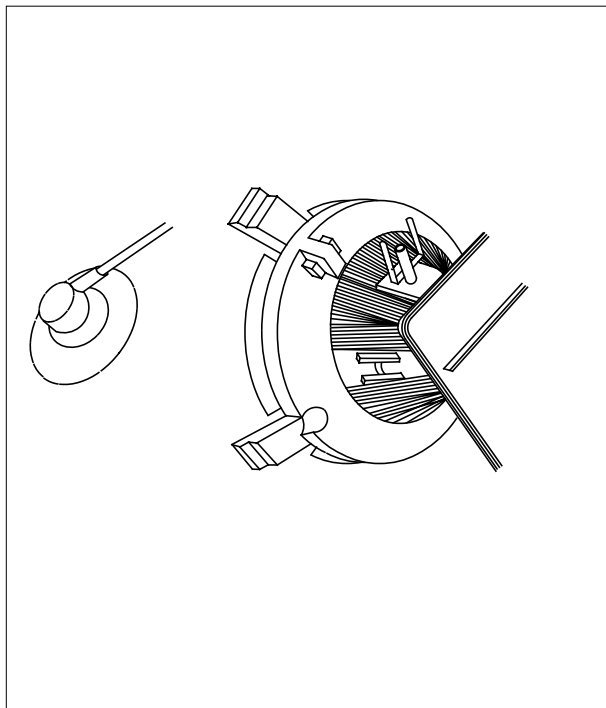
3-1 Back Cover Removal



1. After removing the screws, press the tension rib and pull the cabinet backwards.
2. To reassemble, press the tension rib (see diagram).



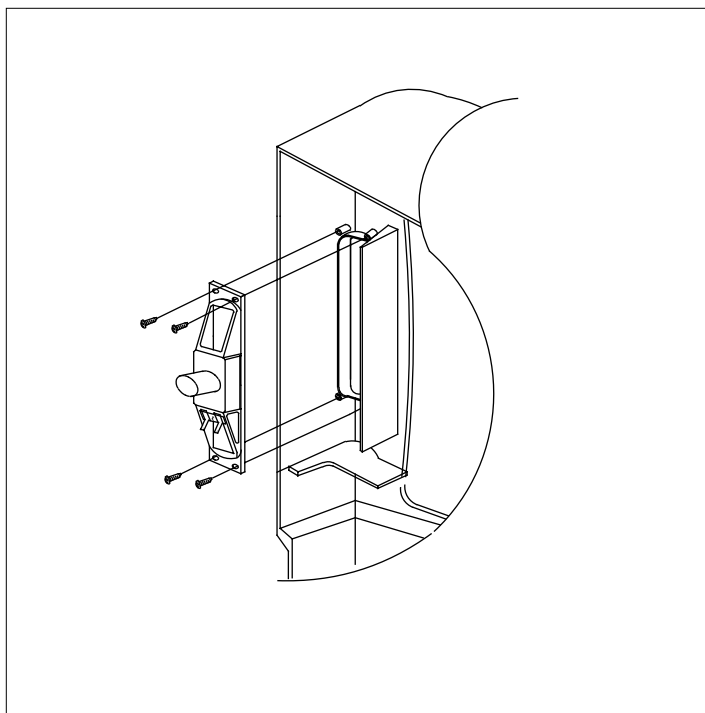
3-2 Main Board Removal



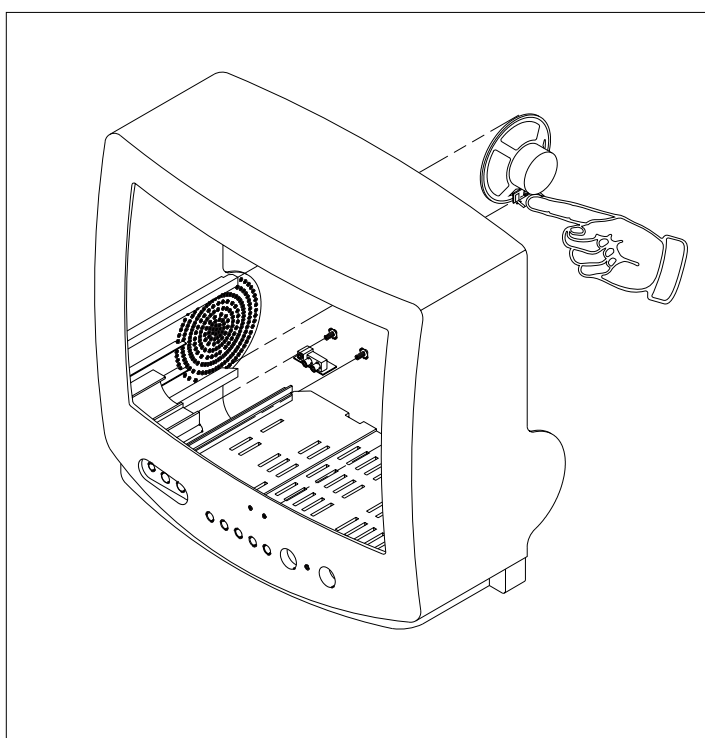
1. Separate the socket board from the CRT neck.
2. Remove the Anode Cap from the CRT.
3. Remove the main board by pulling it with both hands.

Warning: The FBT is charged with high voltage.
Before removing the Anode Cap, discharge the voltage
through one of the heat sinks on the main board.

3-3 Speaker Removal

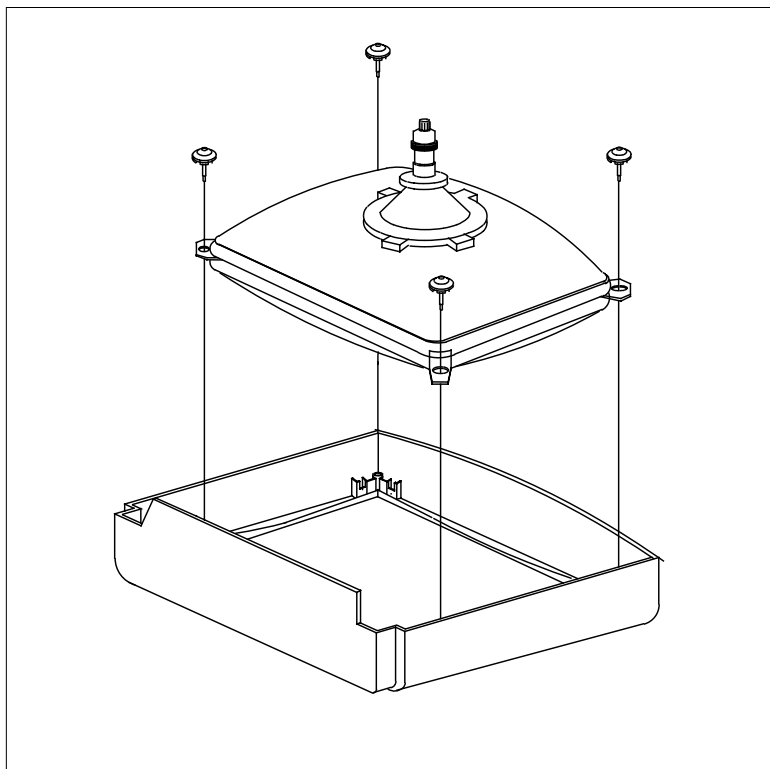


1. Remove the speaker by pressing the tension rib.



1. Remove the screws.
2. Remove the speaker by pressing the tension rib.

3-4 CRT Removal



1. Spread a soft mat on the floor. Place the TV set face down.
2. Remove the 4 nuts mounting the CRT to the front cabinet. Lift the CRT.
3. Caution: Because of the high vacuum and large surface area of the picture tube, be careful while handling it: (1) Always lift the picture tube by grasping it firmly around the faceplate, (2) Never lift the tube by its neck. (3) Do not scratch the picture tube or apply excessive pressure. Fractures of the glass may cause an implosion.

4. Alignment and Adjustments

4-1 Preadjustment

4-1-1 Factory Mode

1. Do not attempt these adjustments in the Video Mode.
2. The Factory Mode adjustments are necessary when either the EEPROM (IC902) or the CRT is replaced.
3. Do not tamper with the "Adjustment" screen of the Factory Mode menu. This screen is intended only for factory use.

4-1-2 When EEPROM (IC902) Is Replaced

1. When IC902 is replaced all adjustment data revert to initial values. It is necessary to re-program this data.
2. After IC902 is replaced, warm up the TV for 10 seconds.

4-1-3 When CRT Is Replaced

1. Make the following adjustments AFTER setting up after setting up purity and convergence :
 - White Balance
 - Sub-Brightness
 - Vertical Center
 - Vertical Size
 - Horizontal Size
 - Fail Safe (This adjustment must be the last step).
2. If the EEPROM or CRT is replaced, set PVA to 45 (factory mode) and set SC as follows.
 - 14, 16 inch : 0
 - 20 inch : 10
 - 21 inch : 12

4-2 Factory/Service Mode

4-2-1 Procedure for the "Adjustment" Mode

1. This mode uses the standard remote control. The Service Mode is activated by entering the following remote-control sequence :
 - (1) SLEEP→FACTORY.
 - (2) STAND-BY→DISPLAY→P.STD→MUTE→POWER ON.
2. The "SERVICE (FACTORY)" message will be displayed. The Service Mode has four components: Adjustment, Test Pattern, Option Bytes and Reset.
3. Access the Adjustment Mode by pressing the "VOLUME" keys (Up or Down). The adjustment parameters are listed in the accompanying table, and selected by pressing the CHANNEL keys (▲, ▼).
4. Selection sequences for the all system:
 - DOWN or UP key:
 - AGC>VCO>SBT>SCT>SCR>SC>RG>GG>BG>CDL>BLU>PSL>PVS>PVA>PHS>NSR>STT
5. The VOLUME keys increase or decrease the adjustment values (stored in the non-volatile memory) when Adjustment Mode is cancelled.
6. Cancel the Adjustment Mode by re-pressing the "FACTORY" or "Power OFF" keys.

4-2-2 Main Adjustment Parameter

Table 4-1 Main Adjustment Parameter (Zilog, Philips μ -com)				
FUNCTION	OSD ABBREVIATION	RANGE	INITIAL DATA	REMARK
AUTO GAIN CONTROL	AGC	0 ~ 63 STEP	10	TDA8842 TDA8841
VOLTAGE CONTROL OSCILLATOR	VCO	0 ~ 128 STEP	80	
		0 ~ 1 STEP	1 (For East Europe)	
SUB BRIGHT	SBT	0 ~ 23 STEP	8	
SUB CONTRAST	SCT	0 ~ 23 STEP	10	
SUB COLOR	SCR	0 ~ 23 STEP	10	
S-CORRECTION	SC	0 ~ 63 STEP	12	
RED DRIVE GAIN	RG	0 ~ 63 STEP	47	
GREEN DRIVE GAIN	GG	0 ~ 63 STEP	32	
BLUE DRIVE GAIN	BG	0 ~ 63 STEP	34	
CATHODE DRIVE LEVEL	CDL	0 ~ 7 STEP	4	
BLUE STRETCH MODE	BLU	0 ~ 3 STEP	0	
PAL VERTICAL SLOPE	PSL	0 ~ 63 STEP	32	
PAL VERTICAL SHIFT	PVS	0 ~ 63 STEP	32	
PAL VERTICAL AMPLITUDE	PVA	0 ~ 63 STEP	42	
PAL HORIZONTAL SHIFT	PHS	0 ~ 63 STEP	40	
NTSC SUB COLOR	NSR	0 ~ 23 STEP	7	
SUB TINT	STT	1 ~ 13 STEP	0	
TTX SUB-CONTRAST	TSS	0 ~ 63 STEP	16 (Only TTX Model)	

NOTE : PVS,PVA, PHS, parameters must be aligned using the 50Hz vertical-field rates.

4-2-3 Test Pattern (Aging Mode)

1. This mode can be used during servicing, or for confirming that the convergence and purity adjustments are correct.
2. Access the Test Pattern parameters by pressing a CHANNEL keys (▲, ▼) while the Service Mode is on. The cursor will move to the test pattern. Press the VOLUME keys. On-screen display:

• WHITE — NON -TTX MICOM ONLY

• AGING — TTX MICOM

3. AGING Mode (Reference Only)

This pattern is used for pre-heating the CRT during manufacturing
—it is accessed in the factory by twice pressing the “SLEEP → FACTORY→FACTORY” key, then white pattern will be displayed.

Even if the TV power is cut off, the Aging Mode is not cancelled, The aging mode is cancelled by repressing the “FACTORY” key or pressing the local “CH UP/DOWN” keys.

4-2-4 Option Bytes

In the Service Mode, various can be selected via the Option Bytes (8 bits each). Example:

SYSTEM OSD DISPLAY		BIT 6	BIT 5	BIT 4	BIT 3	BIT 2	BIT 1	BIT 0
BYTE 0 : 8	-			L (BIT : 0)	H (BIT : 8)	L (BIT : 0)	L (BIT : 0)	L (BIT : 0)
BYTE 1 : 0	-	L (BIT : 0)	L (BIT : 0)	L (BIT : 0)	L (BIT : 0)	L (BIT : 0)	L (BIT : 0)	L (BIT : 0)

TDA8842, CK SYSTEM, RCA JACK SYSTEM OSD DISPLAY

BYTE 0 : 11	—————	L (BIT : 1)	H (BIT : 0)	L (BIT : 0)	H (BIT : 0)	L (BIT : 1)
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4-2-4 (A) NON-TTX MICOM (SZM-173EC) OPTION BYTE (FOR CHINA/SINGAPORE/GERMAN ARMY)

	Destination	BYTE 0	BYTE 1
MP (Massproduction) OPTION BYTE	China	15	58
	Singapore	57	58
	German Army	57	18
	Hotel (CB)	59	1A

BYTE	BIT	LOW (0)		HIGH (1)		Application MICOM	
B Y T E 0	D7	NOT USED				MUST LOW	
	D6	TV : NORMAL → ZOOM A/V :NORMAL → ZOOM		TV: NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM		MUST = LOW : China (only) 16 : 9 (Delete)	
	D5	NOT USED				MUST = LOW	
	D4	CH Up/down functional in the A/V Mode (SCART Jack)		CH Up/down not functional in the A/V Mode (RCA Jack)		MUST = HIGH	
	D3	Sound-I System Used		Sound-I System Not Used			
	D2	D2	D1	COLOR SYSTEM		SOUND SYSTEM	Remark
		0	0	● CB : NO OSD			China MP : CD German Army : CS <div>D3 BIT OPTION</div>
		0	1	● CW : ■ RF : AUTO → PAL → SECAM → NT4.43 ■ A/V : AUTO → PAL → SECAM → NT4.43 → NT3.58		"?" → B/G → D/K → I	
	1	0	● CD : ■ RF : AUTO → PAL → NT4.43 ■ A/V : AUTO → PAL → NT4.43 → NT3.58		"?" → D/K ↔ I		
	D1	1	1	● CS : ■ RF: AUTO → PAL → SECAM → NT4.43 → NT3.58 ■ A/V: AUTO → PAL → SECAM → NT4.43 → NT3.58		"?" → B/G → D/K → (I) → NT- M	
		D0	TDA8374A		TDA8842		
B Y T E 1	D7	TV OUT		MONITOR OUT			
	D6	English ONLY		English/Chinese		MUST = HIGH	
	D5	AFT ON (always)		AFT OFF (after fine tuning)		BASIC = LOW	
	D4	Existing Sharpness level (when using the TDA6108 RGB AMP)		Sharpness level up (when using the TDA6107Q RGB AMP)		BASIC = HIGH	
	D3	No Auto Power On		Auto Power On		BASIC = HIGH	
	D2	NTSC : 25K Hz (NTSC TABLE) PAL : 50K Hz (PAL TABLE)		NTSC : 25KHz (NTSC TABLE) PAL : 27KHz (NTSC TABLE)			
	D1	Others		HOTEL			
	D0	NOT USED MUST LOW					

- Function Required :
1. PICTURE OFF (after 15 minutes) during no signal
 2. AUDIO MUTE during no signal
 3. BLUE SCREEN ON/OFF
 4. TIMER CLOCK ON/OFF
 5. No CHILD LOCK

4-2-4 (B) NON-TTX MICOM (SZM-173EW/EE) OPTION BYTE (FOR EUROPE)

		Destination	BYTE 0	BYTE 1
MP OPTION BYTE		United Kingdom	C3	98
		France/Swiss	45	9A
		Western Europe (except UK)	45	98
		Eastern Europe	41	58
		Ireland (CII)	43	98
BYTE	BIT	LOW(0)	HIGH(1)	Remark
B Y T E 0	D7	3 BAND	UHF ONLY	HIGH (UK only)
	D6	TV : NORMAL → ZOOM A/ : NORMAL → ZOOM	TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM	MUST = HIGH
	D5	MUST LOW		POLAND OPTION - R 913 : 680Ω added - J901 : delete
	D4	CH Up/down functional in the A/V Mode (SCART Jack)	CH Up/down not functional in the A/V Mode (RCA Jack)	MUST = LOW
	D3	NOT USED		MUST = LOW
	D2	D2 D1	SOUND SYSTEM	COLOR SYSTEM
	D1	0 0	"?" → B/G ↔ D/K : CK MODEL	Destination Eastern Europe/France/Swiss
		0 1	I ONLY (NO OSD) : CI,CII MDL	United Kingdom
		1 0	B/G ONLY (NO OSD) : CB,CX MDL	Western Europe
		1 1	NOT USED	
	D0	TDA8374A	TDA8842	IC201 (ONE-CHIP) OPTION
B Y T E 1	D7		English/German/Dutch/Italian/Spanish/ Swedish/Croatian/Yugo/Greek/French	Western Europe (SZM-173EW/EW1)
	D6		English/Romanian/Hungarian/Polish/ Czech/Bulgarian	Eastern Europe (SZM-173EE)
	D5	AFT ON (always)	AFT OFF (after fine tuning)	MUST = LOW
	D4	Existing sharpness level : TDA6108	Sharpness level up : TDA6107Q	MUST = HIGH
	D3	No Auto Power On	Auto Power On	MUST = HIGH
	D2	NTSC : 25 KHz (NTSC TABLE) PAL : 50 KHz (PAL TABLE)	NTSC : 25KHz(NTSC TABLE) PAL : 27KHz(NTSC TABLE)	
	D1	PAL / SECAM	SECAM - L	- France/Swiss (only) : HIGH
	D0	MUST : LOW		

● P-STD Classification (CON./BRI./SHAR./COL)

STANDARD MODE	DYNAMIC MODE	MOVIE MODE	MILD MODE	CUSTOM MODE
90/50/50/50	100/50/75/50	90/50/75/50	60/50/50/50	90/50/50/50

- Function Required: 1. PICTURE OFF (after 15 minutes) during no signal. 2. AUDIO MUTE during no signal.
3. No BLUE SCREEN during no RF signal (Blue Screen during AV).
4. No TIMER. 5. No CHILD LOCK. 6. See "Detailed functions of CF".

4-2-4 C) NON-TTX MICOM (SZM-173ER) OPTION BYTE (FOR RUSSIA)

Destination		BYTE 0		BYTE 1	
Russia,CIS		49		58	
Australia		5D		18	
India (CB MONO MODEL)		5D		38	

BYTE	BIT	LOW(0)		HIGH(1)		Remark	
B Y T E 0	D7					MUST = LOW	
	D6	TV : NORMAL → ZOOM A/V : NORMAL → ZOOM		TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM		MUST = HIGH	
	D5					MUST = LOW	
	D4	CH Up/down functional in the A/V Mode (SCART Jack)		CH Up/down not functional in the A/V Model (RCA Jack)			
	D3	PAL-I Used		PAL-I Not Used		MUST = HIGH	
	D2	D2	D1	SOUND SYSTEM		COLOR SYSTEM	
		0	0	"?" → B/G ↔ D/K : CK MODEL		AUTO : NO OSD	
		0	1	I ONLY (NO OSD) : CI,CII MDL			
	D1	1	0	B/G ONLY (NO OSD) : CB,CX MDL			
		1	1	NOT USED			
D0	TDA8374A		TDA8842		IC201 (ONE-CHIP) OPTION		

B Y T E 1	D7					MUST = LOW	
	D6	English		English/Russian			
	D5	AFT ON (always)		AFT OFF (after fine tuning)		BASIC = LOW (India HIGH)	
	D4	Existing sharpness level (when using the TDA6108 RGB AMP)		Sharpness level up (when using the TDA6107Q AMP)		MUST = HIGH	
	D3	No Auto Power On		Auto Power On		BASIC = HIGH	
	D2	NTSC: 25 KHz (NTSC TABLE) PAL : 50 KHz (PAL TABLE)		NTSC : 25 KHz (NTSC TABLE) PAL : 27 KHz (NTSC TABLE)			
	D1	NOT USED (MUST = LOW)					
	D0						

● P-STD Classification (CON/BRI/SHAR/COL)

STANDARD MODE	DYNAMIC MODE	MOVIE MODE	MILD MODE	CUSTOM MODE
90/50/50/50	100/50/75/50	90/50/75/50	60/50/50/50	90/50/50/50

- Function Required :
1. PICTURE OFF (after 15 minutes) during no signal
 2. AUDIO MUTE during no signal
 3. BLUE SCREEN available
 4. TIMER available
 5. No CHILD LOCK

4-2-4 (D) NON-TTX MICOM (SZM-173AR/EA) OPTION BYTE (FOR MIDDLE EAST/AFRICA)

		Destination		BYTE 0	BYTE 1
MP OPTION BYTE		Middle East (EA or AR)		7F	58
		Africa (EA)		67	D8
		GAME (Middle East)		7F	5A

BYTE	BIT	LOW (0)		HIGH (1)		Remark
B Y T E 0	D7					MUST = LOW
	D6	TV : NORMAL → ZOOM A/V : NORMAL → ZOOM		TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM		MUST = HIGH
	D5	NOT USED		CHILD LOCK ON		MUST = HIGH
	D4	CH Up/down functional in the A/V Mode (SCART Jack)		CH Up/down not functional in the A/V Model (RCA Jack)		Middle East : HIGH Africa : LOW
	D3	Sound-I System Used		Sound-I System Not Used		
	D 2	D2	D1	COLOR SYSTEM		SOUND SYSTEM
		0	0	● CK : AUTO (NO OSD)		"?" → B/G → D/K
		0	1	● CW : -. RF : AUTO → PAL → SECAM → NT4.43 -. A/V : AUTO → PAL → SECAM → NT4.43 → NT3.58		"?" → B/G → D/K → I
	D 1	1	0	● CB : -. RF : PAL ONLY - A/V : AUTO → PAL → NT4.43 → NT3.58		B/G ONLY (NO OSD)
		1	1	● CS : -. RF : AUTO → PAL → SECAM → NT4.43 → NT3.58 -. A/V : AUTO → PAL → SECAM → NT4.43 → NT3.58		"?" → B/G → D/K → I → NT- M →
	D0	TDA8374A		TDA8842	IC201 (ONE-CHIP) OPTION	

B Y T E 1	D7	D7	D6	LANGUAGE	Remark
		0	0	-	NOT USED
		0	1	ENG / ARAB	Middle East
		1	0	-	NOT USED
	D6	1	1	ENG / ARAB / FRENCH	EA VERSION (Africa ONLY)
	D5	AFT ON (always)		AFT OFF after fine tuning	MUST = LOW
	D4	Existing sharpness level (when using the TDA6108 RGB AMP)		Sharpness level up (when using the TDA6107Q RGB AMP)	MUST = HIGH
	D3	No Auto Power On		Auto Power On	MUST = HIGH
	D2	NTSC : 25 KHz (NTSC TABLE) PAL : 50 KHz (PAL TABLE)		NTSC : 25 KHz (NTSC TABLE) PAL : 27 KHz (NTSC TABLE)	
	D1	Others		GAME	
	D0	MUST = LOW			

- Function Required :
1. PICTURE OFF (after 15 minutes) during no signal
 2. AUDIO MUTE during no signal.
 3. BLUE SCREEN ON/OFF
 4. TIMER (CLOCK ON/OFF)
 5. CHILD LOCK ON (always)

4-2-4 (E) NON-TTX MICOM (SZM-173EV/ET) OPTION BYTE (FOR ASIA)

	DESTINATION	LINE-STREEO		MONO(TV-OUT)		MONO(MONO-OUT)	
		BYTE 0	BYTE 1	BYTE 0	BYTE 1	BYTE 0	BYTE 1
OPTION - BYTE	Vietnam / Malaysia	DF	D8	5F	58	5F	D8
	Indonesia (CB MODEL CLOCK ON)	DD	DA	5D	5A	5D	DA
	Thailand (CB MODEL)	—		5D	58	5D	D8
	India (CB MODEL AFT OFF)	DD	B8	—	—	—	—
	India (CS MODEL AFT OFF)	DF	B8	5F	38	5F	B8

BYTE	BIT	LOW (0)		HIGH (1)		Remark	
B Y T E 0	D7	LINE STEREO OFF		LINE STEREO ON		SZM-173EV (only)	
	D6	TV : NORMAL → ZOOM A/V : NORMAL → ZOOM		TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM		MUST = HIGH	
	D5					MUST = LOW	
	D4	CH Up/down functional in the A/V Mode (SCART Jack)		CH Up/down not functional in the A/V Mode (RCA Jack)		BASIC = HIGH	
	D3	Sound-I System Used		Sound-I System Not Used			
	D2	D2	D1	COLOR SYSTEM		SOUND SYSTEM	Destination
		0	0	● CK :AUTO (NO OSD)		"?" → B/G→ D/K	
		0	1	● CW : -. RF : AUTO → PAL → SECAM → NT4.43 -. A/V : AUTO → PAL → SECAM → NT4.43 → NT3.58		"?" → B/G → D/K → I	
	D1	1	0	● CB : - RF : PAL ONLY - A/V : AUTO → PAL → NT4.43 → NT3.58		B/G ONLY (NO OSD)	Indonesia/Thailand/ India
		1	1	● CS: - RF : AUTO → PAL → SECAM → NT4.43 → NT3.58 -A/V : AUTO → PAL → SECAM → NT4.43 → NT3.58		"?" → B/G→ D/K → I NT- M→	Vietnam Malaysia
	D0	TDA8374A		TDA8842		IC201 (ONE-CHIP) OPTION	
B Y T E 1	D7	TV OUT		MONITOR OUT			
	D6	English ONLY		English/Vietnamese/Indonesian/Malay		SZM-173EV	
				English/Thai		SZM-173ET	
	D5	AFT ON (always)		AFT OFF (after fine tuning)			
	D4	Existing sharpness level (when using the TDA6108 RGB AMP)		Sharpness level up (when using the TDA6107Q RGB AMP)		MUST = HIGH	
	D3	No Auto Power On		Auto Power On		BASIC = HIGH	
	D2	NTSC : 25KHz (NTSC TABLE) PAL : 50KHz (PAL TABLE)		NTSC : 25KHz (NTSC TABLE) PAL : 27KHz (PAL TABLE)		MUST = LOW	
	D1	CLOCK DISPLAY OFF		CLOCK DISPLAY ON		Indonesia ONLY : HIGH	
D0	MUST = LOW						

- Function Required : 1. PICTURE OFF (after 15 minutes) during no signal. 2. AUDIO MUTE during no signal.
3. BLUE SCREEN ON/OFF. 4. TIMER (CLOCK ON/OFF). 5. No CHILD LOCK

SZM -173ET (16K) : Z90203 → WITHOUT LINE STEREO

SZM -173EV (24K) : Z90234 → WITH LINE STEREO

4-2-4 (F) TTX MICOM (SZM-175EA/EP) OPTION BYTE (FOR MIDDLE EAST ASIA)

MP OPTION BYTE	Destination		Application MICOM		BYTE0	BYTE1
	Iran (Persian TTX)		SPM-175EP		1F	1B
	Middle East (except Iran)		SPM-175EA		1F	1B
	Africa				07	1B
	Singapore				17	1B

BYTE	BIT	LOW (0)		HIGH (1)		Application MICOM		
B Y T E 0	D7	NOT USED				ALL = LOW		
	D6	TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM		TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM → 16:9		MUST = LOW		
	D5	NOT USED				ALL = LOW		
	D4	CH Up/down functional in the A/V Mode (SCART Jack)		CH Up/down not functional in the A/V Mode (RCA Jack)		- Africa : SCART - Others : RCA		
	D3	Sound-I System Used		Sound-I System Not Used				
	D2	D2	D1	COLOR SYSTEM		SOUND SYSTEM		Remark
		0	0	● CK : AUTO (NO OSD)		"?" → B/G → D/K		No sound system in the A/V MODE
		0	1	● CW : ■ RF : AUTO → PAL → SECAM → NT4.43 ■ A/V : AUTO → PAL → SECAM → NT4.43 → NT3.58		"?" → B/G → D/K → I →		
	D1	1	0	● CB : ■ RF : PAL ONLY (NO OSD) ■ A/V : AUTO → PAL → NT4.43 → NT3.58		B/G ONLY (NO OSD)		
		1	1	● CS : ■ RF : AUTO → PAL → SECAM → NT4.43 → NT3.58 ■ A/V : AUTO → PAL → SECAM → NT4.43 → NT3.58		"?" → B/G → D/K → I → NT → M →		
	D0	TDA8374A		TDA 8842				

B Y T E 1	D7	NOT USED				ALL (FIX = LOW)		
	D6							
	D5							
	D4	Existing sharpness level (when using the TDA6108 RGB AMP)		Sharpness level up (when using the TDA6107Q RGB AMP)		ALL (BASIC = HIGH) → TEST Unnecessary		
	D3	No Auto Power On		Auto Power On		ALL (BASIC = HIGH)		
	D2	NTSC : 25 KHz (NTSC TABLE) PAL : 50 KHz (PAL TABLE)		NTSC : 25 KHz (NTSC TABLE) PAL : 27 KHz (NTSC TABLE)				
	D1	D1 D0		00	01	10	11	MUST = HIGH
	D0			B/G	D/K	I	?	

● OSD language by micom

1. Persian (for Iran) : SPM-175EP : English/Persian (Iranian)
2. Arab (Middle East, Africa) : SPM-175EA : English/French/Arabian

● Function Required : 1. PICTURE OFF (after 15 minutes) during no signal

2. AUDIO MUTE (during no signal)
3. No BLUE SCREEN
4. No TIMER
5. No CHILD LOCK

4-2-4 (G) TTX MICOM (SPM-175EE/ER/EG/EU) OPTION BYTE (FOR EUROPE)

		Destination		Application MICOM		BYTE 0		BYTE 1		LANGUAGE	
MP OPTION BYTE		United Kingdom (CI)		SPM-175EE		83		18		See BYTE 1 D5	
		Other Western Europe (CB)				05		18			
		Eastern Europe (CK)				01		38			
		Ireland (CII)				03		18			
		France/Swiss		SPM-175EU		05		58		English/Yugo/Greek	
		Yugo/Greece		SPM-175EG		05		18			
		Russia/Bulgaria		SPM-175ER		01		19		English/Russian/Bulgarian	
BYTE	BIT	LOW(0)				HIGH(1)				Remark	
B Y T E 0	D7	3 BAND				UHF DNLY (UK only)					
	D6	TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM				TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM → 16:9					
	D5	MUST = LOW				<POLAND OPTION> R 913 : 680Ω added. J901 : Delete					
	D4	CH Up/Down functional in the A/V Mode (SCART Jack)				CH Up/Down not functional in the A/V Model (RCA Jack)				MUST = LOW	
	D3	P-STD NORMAL				P-STD MAX				MUST = LOW	
	D2	D2	D1	SOUND SYSTEM			COLOR SYSTEM		Remark		
		0	0	"?" → B/G ↔ D/K : CK MODEL			AUTO (NO OSD)		No SOUND SYSTEM in the A/V Mode		
		0	1	I ONLY (NO OSD) : CI,CII MODEL							
		D1	1	0	B/G ONLY (NO OSD): CB,CX MODEL						
	1		1	NOT USED							
D0	TDA8374A				TDA8842						
B Y T E 1	D7	NOT USED								FIX = LOW	
	D6	PAL/SECAM				SECAM - L				HIGH (CF only)	
	D5	English/German/French/Dutch/ Italian/Spanish/Swedish				English/Croatian/Romanian/ Hungarian/Polish/Czech				This bit is only applied to SPM-175EE	
	D4	Existing sharpness level (when using the TDA6108 RGB AMP)				Sharpness level up (when using the TDA6107Q AMP)				ALL BASIC = HIGH → TEST Unnecessary	
	D3	No Auto Power On				Auto Power On				ALL BASIC = HIGH	
	D2	NTSC : 25KHz (NTSC TABLE) PAL : 50KHz (PAL TABLE)				NTSC : 25KHz (NTSC TABLE) PAL : 27KHz (NTSC TABLE)				ALL (RF VOL. CURVE) BASIC = LOW	
	D1	MUST = LOW									
	D0	B/G				D/K				175ER is only applied (Others = LOW)	

● P-STD Classification (CON/BRI/SHRP/COL)

D3 BIT	STANDARD MODE	DYNAMIC MODE	MOVIE MODE	MILD MODE	CUSTOM MODE
0	90/50/50/50	100/50/50/50	75/55/50/50	60/50/50/50	90/55/25/50

- Function Required : 1. PICTURE OFF (after 15 minutes) during no signal. 2. AUDIO MUTE (during no signal).
3. No BLUE SCREEN. 4. No TIMER (CLOCK /OFF). 5. No CHILD LOCK

4-2-5 RESET

The Reset Mode is used during factory inspection.
Function Reset:

1. Channels	Add/Erase
2. Sort	Non
3. System	Auto
4. Timer	off
5. Blue Screen	off
6. Child Lock	off
7. Picture	standard
8. Volume	10
9. CH. Skip	Erased

4-3 Other Adjustments

4-3-1 General

1. Usually, a color TV needs only slight touch-up adjustment upon installation. Check the basic characteristics such as height, horizontal and vertical sync and focus.
2. The picture should have good black and white details. There should be no objectionable color shading; if color shading is present, perform the purity and convergence adjustments described below.
3. Use the specified test equipment or its equivalent.
4. Correct impedance matching is essential.
5. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test results.
6. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.
7. Do not attempt to connect or disconnect any wires while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.
8. To protect against shock hazard, use an isolation transformer.

4-3-2 Automatic Degaussing

A degaussing coil is mounted around the picture tube, so that external degaussing after moving the TV should be unnecessary. But the receiver must be properly degaussed upon installation.

The degaussing coil operates for about 1 second after the power is switched ON. If the set has been moved or turned in a different direction, disconnect its AC power for at least 30 minutes.

If the chassis or parts of the cabinet become magnetized, poor color purity will result. If this happens, use an external degaussing coil. Slowly move the degaussing coil around the faceplate of the picture tube and the sides and front of the receiver. Slowly withdraw the coil to a distance of about 6 feet before removing power.

4-3-3 High Voltage Check

CAUTION: There is no high voltage adjustment on this chassis. The B+ power supply must be set to +125 volts (Full color bar input and normal picture level).

1. Connect a digital voltmeter to the second anode of the picture tube.
2. Turn on the TV. Set the Brightness and Contrast controls to minimum (zero beam current).
3. The high voltage should not exceed 27.5KV.
4. Adjust the Brightness and contrast controls to both extremes. Ensure that the high voltage does not exceed 27.5KV under any conditions.

4-3-4 FOCUS Adjustment

1. Input a black and white signal.
2. Adjust the tuning control for the clearest picture.
3. Adjust the FOCUS control for well defined scanning lines in the center area of the screen.

4-3-5 Cathode Voltage Adjustment (Screen Adjustment)

1. Connect CRT socket pin GK to an oscilloscope probe.
2. Input a gray scale pattern. (Use a pattern generator, PM5518)
3. Use the P mode key (on the remote control) for the STANDARD picture.
4. Adjust the Screen VR (on the FBT) so that the voltage on the oscilloscope becomes $130 \pm 2.5V$ (See Fig. 4-1).

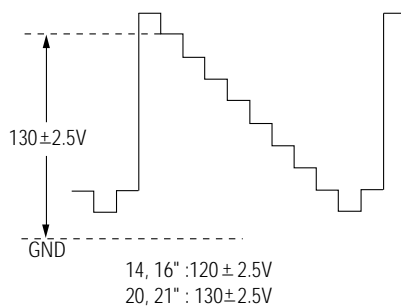


Fig. 4-1

4-3-6 Purity Adjustment

1. Warm up the receiver for at least 20 minutes.
2. Plug in the CRT deflection yoke and tighten the clamp screw.
3. Plug the convergence yoke into the CRT and set in as shown in Fig. 4-2.
4. Input a black and white signal.
5. Fully demagnetize the receiver by applying an external degaussing coil.
6. Turn the CONTRAST and BRIGHTNESS controls to maximum.
7. Loosen the clamp screw holding the yoke. Slide the yoke backward or forward to provide vertical green belt. (Fig. 4-3).
8. Tighten the convergence yoke.
9. Slowly move the deflection yoke forward, and adjust for the best overall green screen.
10. Temporarily tighten the deflection yoke.
11. Produce blue and red rasters by adjusting the low-light controls. Check for good purity in each field.
12. Tighten the deflection yoke.

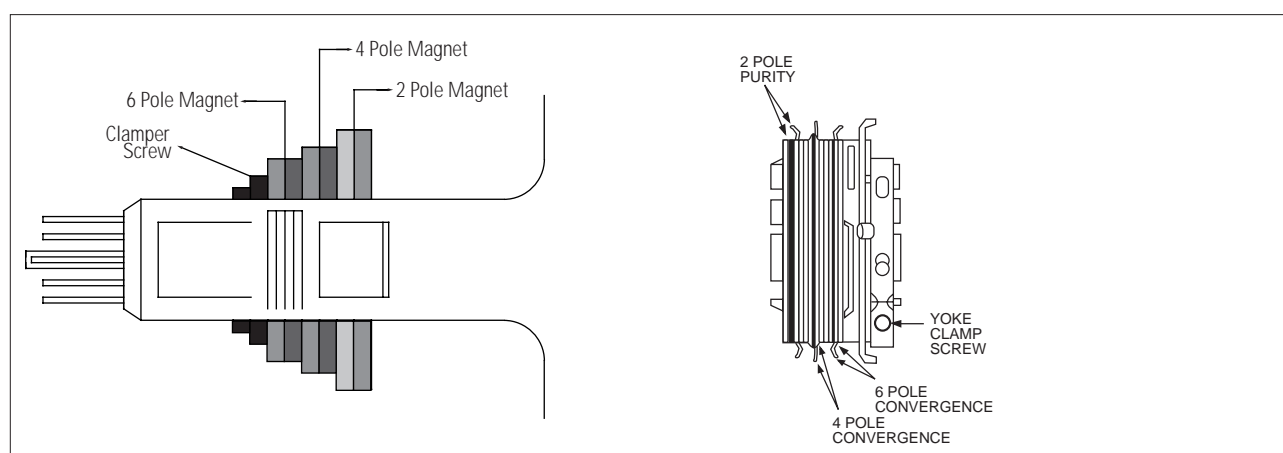


Fig. 4-2 Convergence Magnet Assembly

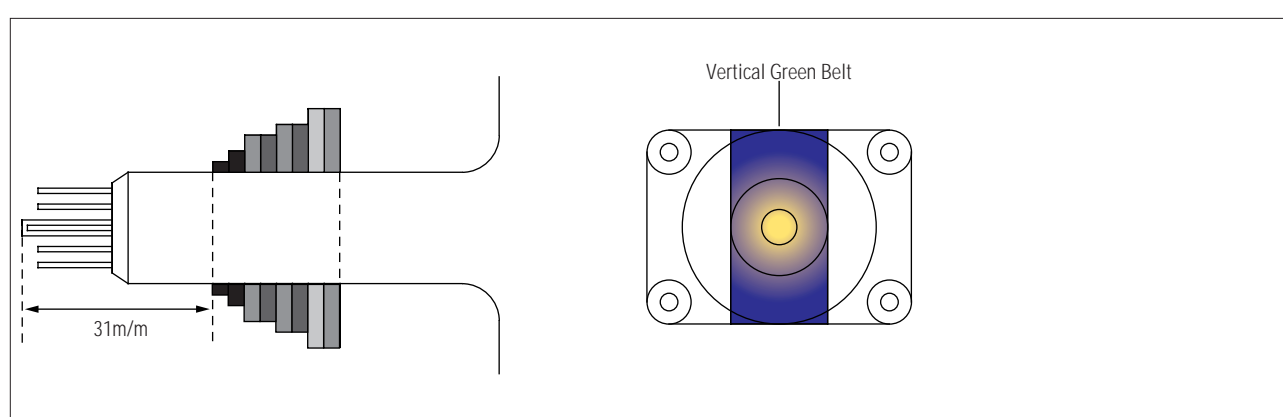


Fig. 4-3 Center Convergence Adjustment

4-3-7 White Balance Adjustment

(a) Set up

1. Warm up the TV for at least 30 minutes in the Aging Mode (OSD White). This mode is displayed by entering the following sequence:

SLEEP → FACTORY → FACTORY

2. Input a Toshiba pattern.

(b) Low-Light Adjustment

1. Set SBT to 1.3 ± 0.2 fL in the Factory Service Mode with using CA100. See Fig. 4-4 ②.
2. Adjust RG,BG so that the levels are suitable to each local area.

(c) High-Light Adjustment

1. Set SCT to 55 FL (20". 21"), 65 FL(14".16") in the Factory Service Mode with using CA100. See Fig. 4-4 ①.

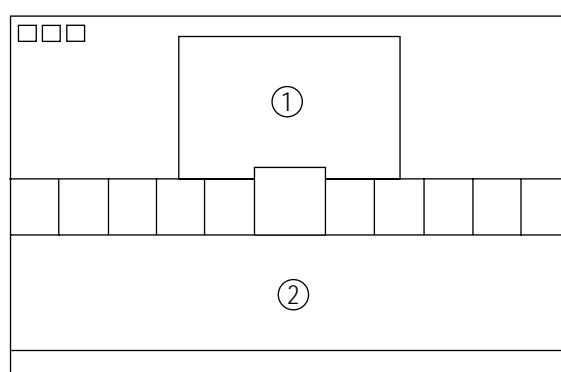


Fig. 4-4

4-3-8 Center Convergence Adjustment

1. Warm up the receiver for at least 20 minutes.
2. Adjust the two tabs of the 4 pole magnets to change the angle between them. Superimpose the red and blue vertical lines in the center area of the screen.
3. Adjust the Brightness and Contrast controls for a well defined picture.
4. Adjust the two-tab pairs of the 4 pole magnets, and change the angle between them. Superimpose the red and the blue vertical lines in the center area of the screen.
5. Turn the both tabs at the same time, keeping the angle constant, and superimpose the red and blue horizontal line in the center of the screen.
6. Adjust the two-tab pairs of the 6-pole magnets to superimpose the red and blue line onto the green. (Changing the angle affects the vertical lines, and rotating both magnets affects the horizontal lines.)
7. Repeat adjustments 2~6, if necessary.
8. Since the 4-pole magnets and 6-pole magnets interact, the dot movement is complex (Fig. 4-5).

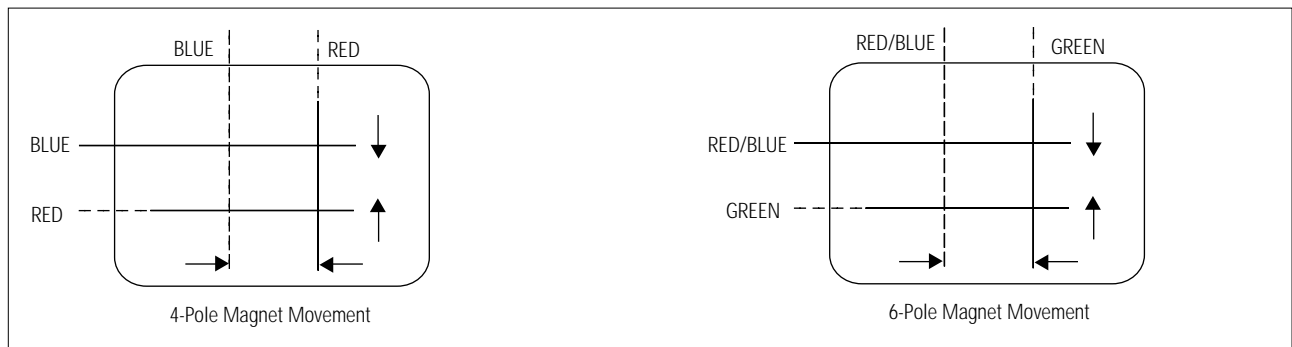


Fig. 4-5 Center Convergence Adjustment

4-3-9 VCO Adjustment

Set the vco data to 80 (Factory Mode).

NOTE : For SZM-173EW and SPM-175E (Western Europe remote control), set the VCO data to 1.

4-3-10 RF AGC Adjustment

Set the AGC data to 14 (Factory Mode).

4-3-11 Sub-Color Adjustment

Set SCR data to 10 (Factory Mode).

4-3-12 Geometry Adjustment

SC → PVA → PVS → PSL → PHS

1. Input a lion head pattern (in the PAL channel).
2. Set the SC (S-Correction) as follows : 12 (21"), 10 (20"), 0 (14", 16") and PVA 40 so that the lion head circle becomes oval.
3. Adjust with PVS (Vertical shift) so that the top margin of the picture is 4.

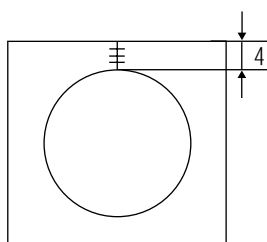


Fig. 4-7

4. Adjust with PSL (Vertical-Slope) so that the bottom margin of the picture is 4.

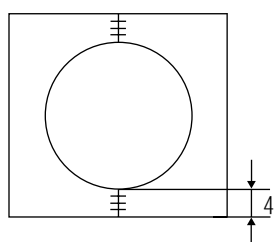


Fig. 4-8

5. Adjust with PHS (Horizontal Shift) so that the lion-head pattern and CRT centers are aligned.

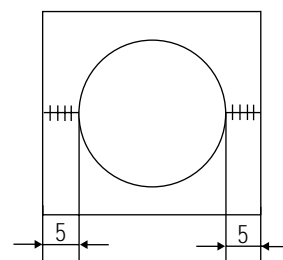


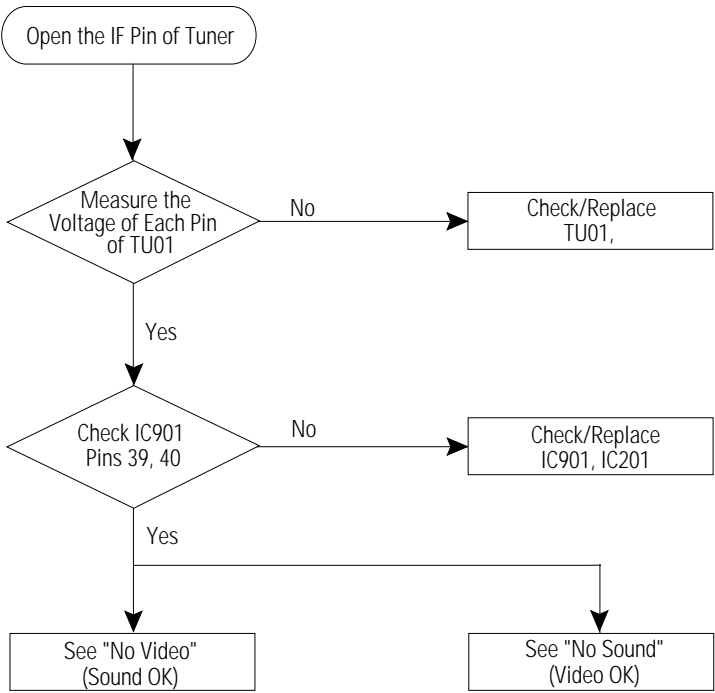
Fig. 4-9

6. Adjust PHS (using the width coil) so that the left and right margins of the picture are 5.

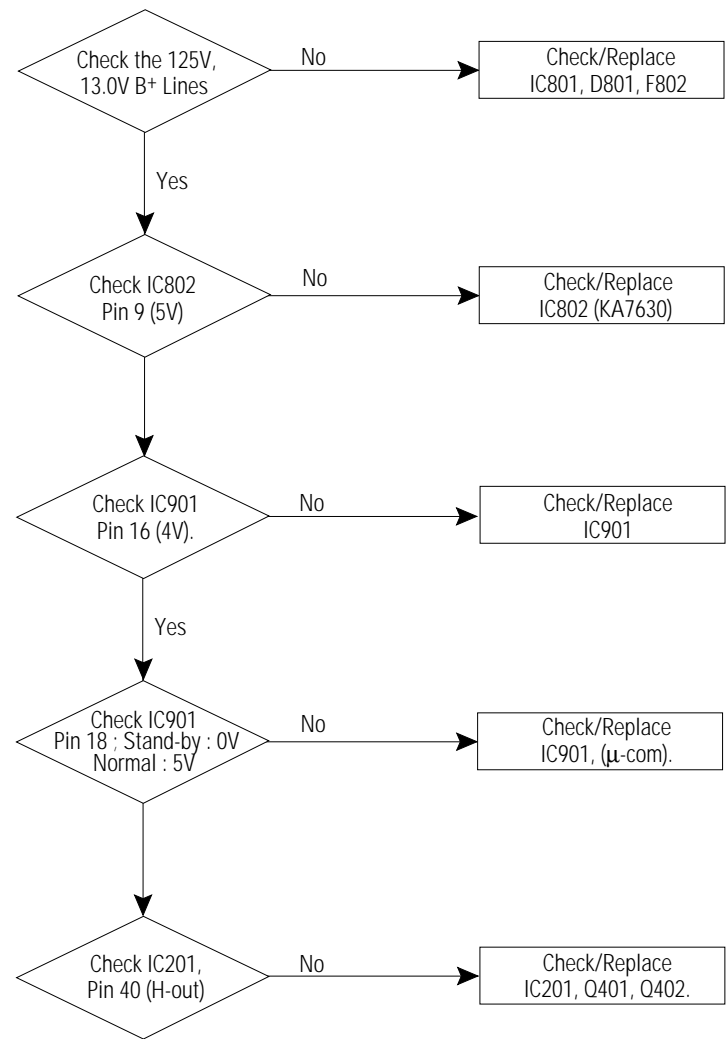
MEMO

5. Troubleshooting

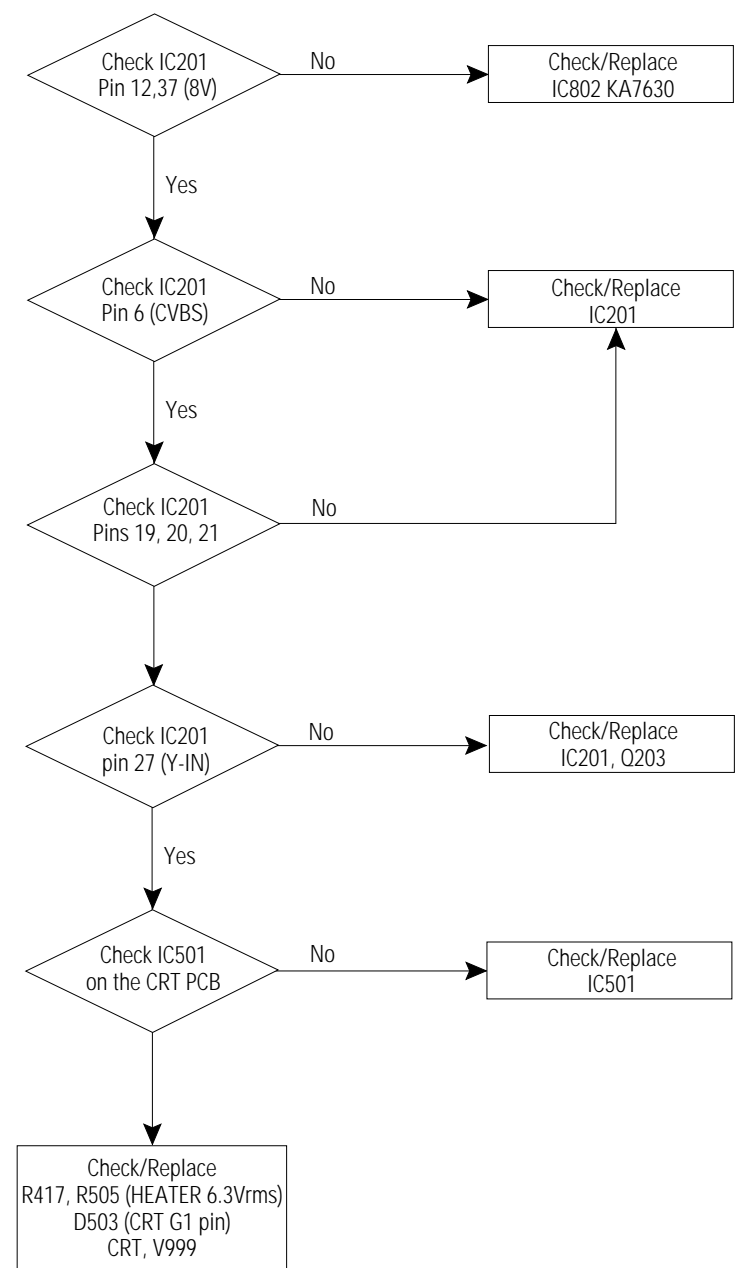
5-1 No Video (Raster On, No Sound)



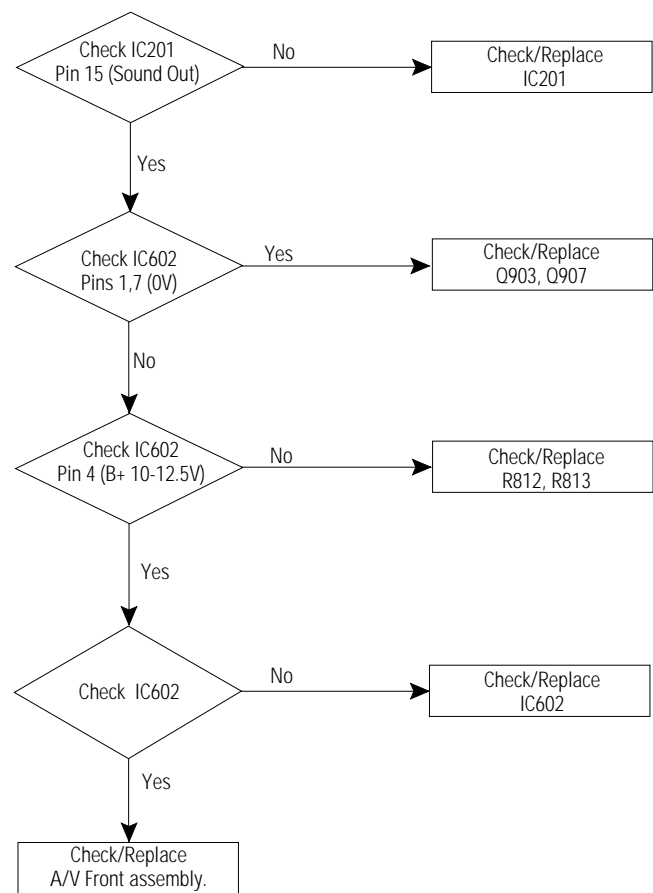
5-2 No Power



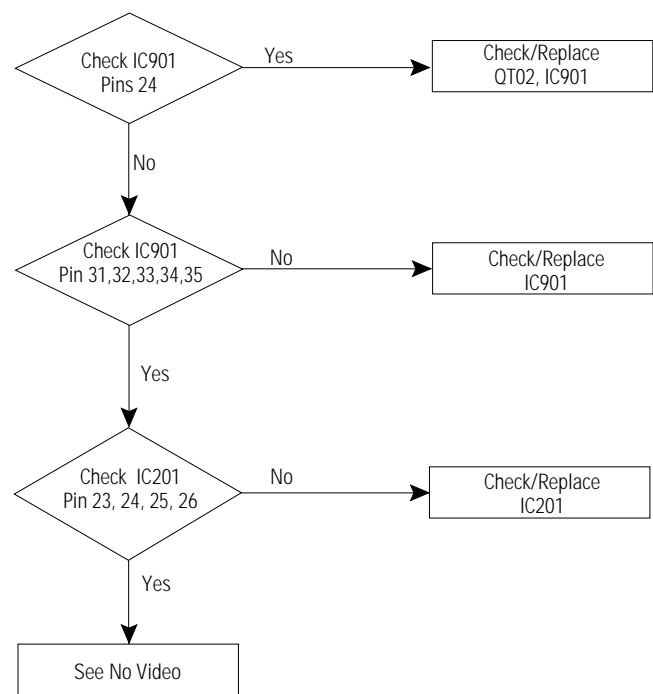
5-3 No Video (Sound OK)



5-4 No Sound (Video OK)

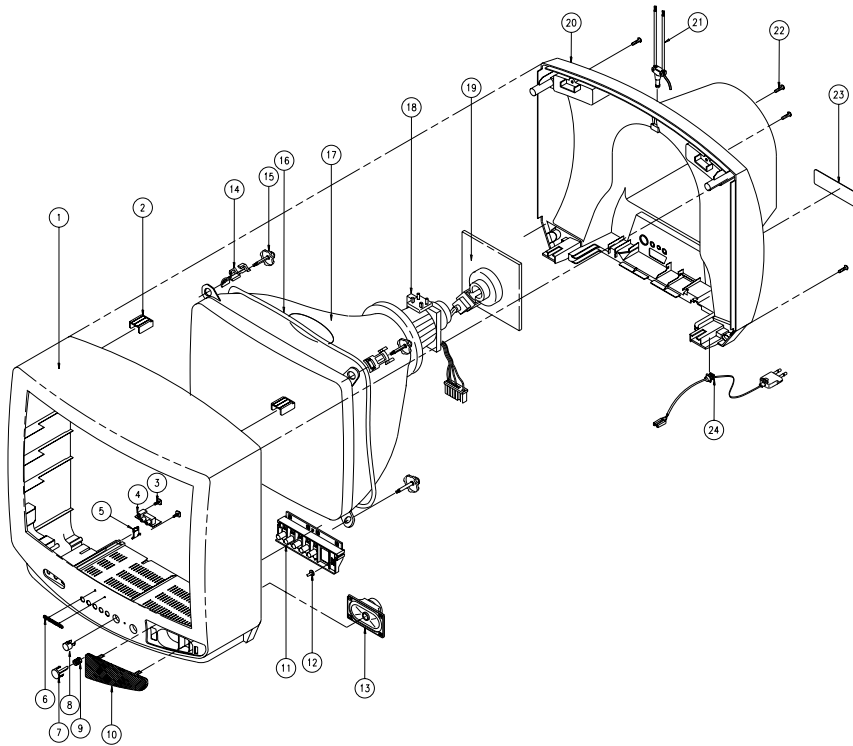


5-5 No TTX



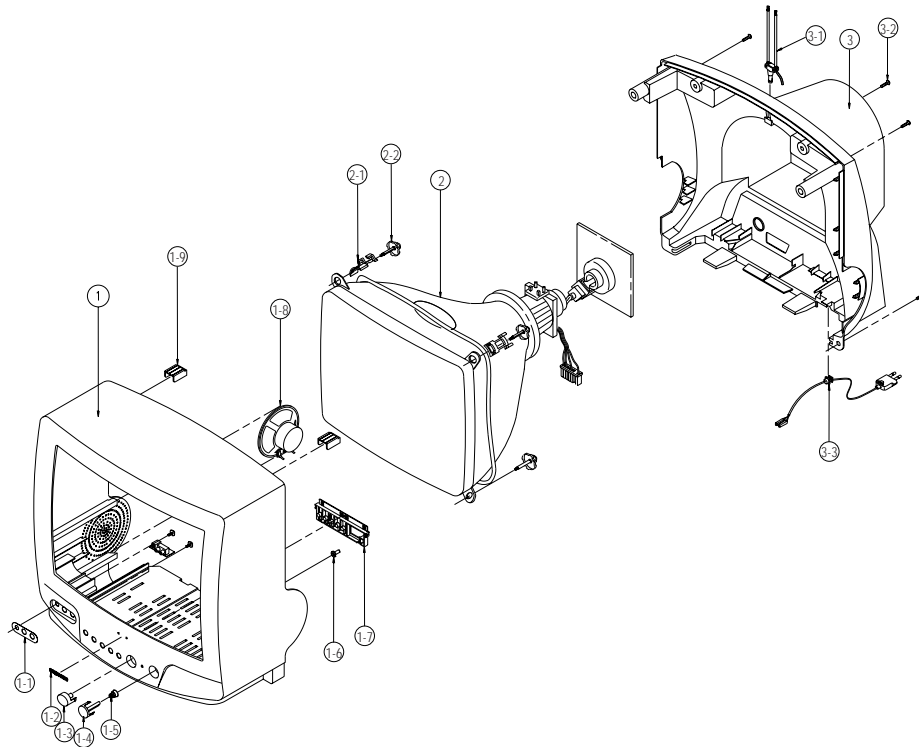
6. Exploded View & Parts List

6-1 CK2173VR5X/BWT



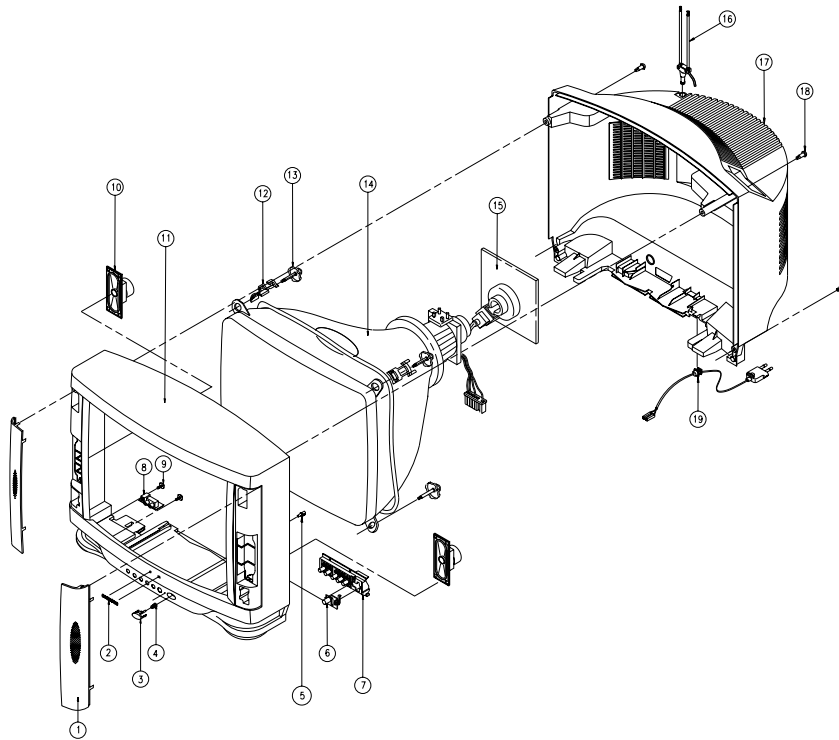
No	Code No	Description	Specification	Q'ty	Remark
1	AA91-10423G	ASSY-CABINET,FRONT	-,5373,(SPK)BK708P MLPG,HB,BLK	1	
2	AA64-00234B	CABINET-FRONT	-,5373,BK708P MLPG,HIPS,HB,BLK	1	
3	AA61-40010A	BOSS-WING	-,HIPS,HB,NTR,-,-	2	
4	6003-001024	SCREW-TAPTITE	RWH,+,B,M4,L12,ZPC(YEL),SWRCH1	2	
5	AA95-90027D	ASSY-PCB,A/V FRONT	-,CK5073,SCT13B,CE,9P,-	1	
6	AA61-40007A	STOPPER-PCB	5038.5368,ABS HB,NTR,-,-,-	1	
7	AA64-70127F	BADGE-BRAND	AL,SAMSUNG,SILVER,L40,R800,NEW	1	
8	AA64-10132A	KNOB-POWER	-,5373,NO-COATING,ABS,HB,BLK	1	
9	AA64-40083A	WINDOW-REMOCON	-,5373,-,PC,V0,VIOLET,-	1	
10	AA61-60003J	SPRING-CS	-,SUS304,0.5,0D6,H12,N7,-,-,-	1	
11	AA63-50097A	GRILLE-WOOFER	-,5373,PA110,SECC,T0.5,-,-	1	
12	AA64-10041A	KNOB-CONTROL	-,5373,-,ABS,HB,BLK	1	
13	AA64-40183A	INDICATOR-LED	-,5373,-,ACRYL,-,-,-	1	
14	3001-000003	SPEAKER	3W,16ohm,88+-2dB,180+-36Hz	1	
15	AA65-30107A	CLAMP-D,COIL	NYLON 66,V2,NTR,-,20-22 INCH,-	4	
16	AA60-10050R	SCREW-ASSY	WC,HH,+,M5,L31.5,SWRCH18A,ZPC(4	
17	AA27-20003Z	COIL-DEGAUSSING	-,21',20.5OHM,35T,L2380,E	1	
18	AA03-10024T	CRT-COLOR	-,A51KQJ63X(H),+380mG,21,90de	1	
19	AA27-50004K	DEFLECTION-YOKE	-,DST-2192ML(H1),21,S/T,2.28m	1	
20	3704-001090	SOCKET-CRT	9P,15.24PI,26.5PI,SN,-	1	
21	AA64-30710D	CABINET-BACK	-,5338.73,-,HIPS,V2,BLK,-,-	1	
22	AA42-10001V	ANT-ROD	-,3S,620mm,BRN,UL/CSA	1	
23	6003-001026	SCREW-TAPTITE	RH,+,B,M4,L15,ZPC(BLK),SWRCH18	4	
24	AA63-30052A	COVER-JACK	-,V-PROJ,ELASTOMER,HB,BLK,-,-	1	
24	AA61-20070A	HOLDER-CORD	-,PP,V0,BLK,KE-0002	1	

6-2 CK1438VR5X/VWT



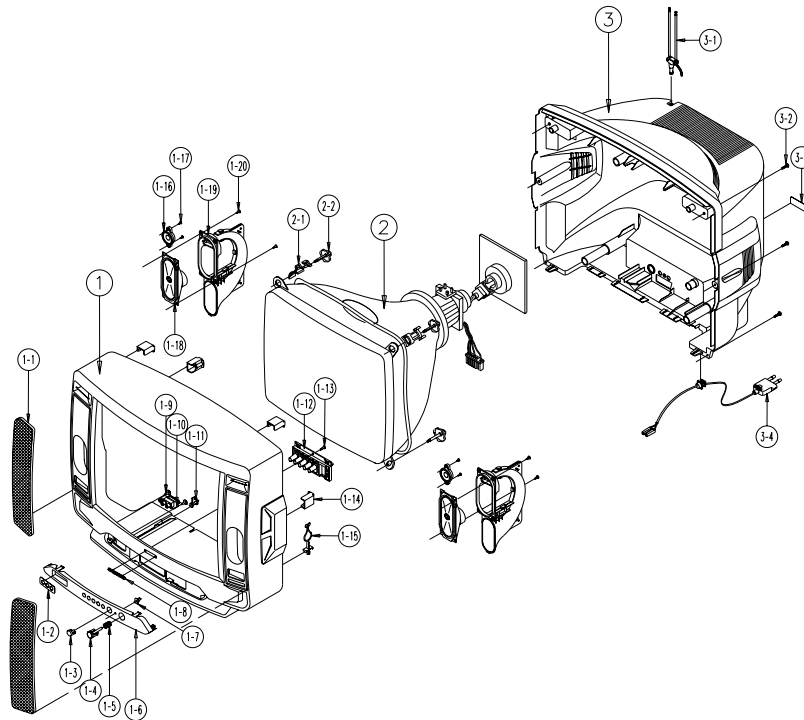
No	Code No	Description	Specification	Q'ty	Remark
1	AA91-00068B	ASSY-CABINET,FRONT	-,3338,MLN,HB,BLK	1	
	AA64-31147K	CABINET-FRONT	-,3338,BK708P MLN,HIPS,HB,BLK,-,-	1	
1-1		CABINET-FRONT OPTION			
1-2	AA64-70127F	BADGE-BRAND	AL,SAMSUNG,SILVER,L40,R800,NEW	1	
1-3	AA64-40057A	WINDOW-REMOCON	-,3338,-,PC,V0,VIOLET,-	1	
1-4	AA64-10153A	KNOB-POWER	-,3338,-,ABS,HB,BLK	1	
1-5	AA61-60003J	SPRING-CS	-,SUS304,0.5,OD6,H12,N7,-,-,-	1	
1-6	AA64-40189A	INDICATOR-LED	-,3338,-,ACRYL,-,CLEAR,-	1	
1-7	AA64-10052A	KNOB-CONTROL	-,3338,-,ABS,HB,BLK	1	
1-8	3001-000275	SPEAKER	2.5W,16ohm,90dB,105Hz	1	
1-9	AA61-40010A	BOSS-WING	-,HIPS,HB,NTR,-,-	2	
2	AA03-10001D	CRT-COLOR	-,A34KQV42X,+380MG,14,90DEG,5	1	
2-1	AA65-30106A	CLAMP-D,COIL	NYLON 66,V2,NTR,-,14 INCH,-	2	
2-2	AA60-10050Q	SCREW-ASSY	WC,HH,+,M5,L26.5,SWRCH18A,ZPC(4	
3	AA64-30381E	CABINET-BACK	-,3338.73,-,HIPS,V2,BLK,-,-	1	
3-1	AA42-10001V	ANT-ROD	-,3S,620mm,BRN,UL/CSA	1	
3-2	6003-001026	SCREW-TAPTITE	RH,+,B,M4,L15,ZPC(BLK),SWRCH18	4	
3-3	AA61-20070A	HOLDER-CORD	-, -,PP,V0,BLK,KE-0002	1	

6-3 CK2085VR5X/BWT



No	Code No	Description	Specification	Q'ty	Remark
1	AA63-50049A	GRILLE-WOOFER	-,5085,PA110 GOJUPA,SECC,T0.5,	2	
2	AA64-70123B	BADGE-BRAND	AL,R2000,SILVER,L=50,SAMSUNG,-	1	
3	AA64-10183A	KNOB-POWER,M	-,33.5085,-,ABS,HB,BLK	1	
4	AA61-60003J	SPRING-CS	-,SUS304,0.5,OD6,H12,N7,-,-,-	1	
5	AA64-40181A	INDICATOR-LED	-,33.50.5385,-,ACRYL,-,-,-	1	
6	AA64-40036A	WINDOW-REMOCON	-,5085,-,PC,-,-,-	1	
7	AA64-10007A	KNOB-CONTROL	-,5085,-,ABS,HB,BLK	1	
8	AA95-90027D	ASSY-PCB,A/V FRONT	-,CK5073,SCT13B,CE,9P,-	1	
9	AA60-10002A	SCREW-TAPPING	RH,+,M4,L12,ZPC(YEL),-,OD14	2	
10	3001-000191	SPEAKER	3W,8ohm,90dB,180Hz	2	
11	AA91-10395F	ASSY-CABINET,FRONT	-,5085,(SPK)BK708P MLPG,HB,BLK	1	
	AA64-31358G	CABINET-FRONT	-,5085,BK708P MLPG,HIPS,HB,BLK,-,-	1	
12	AA65-30107A	CLAMP-D,COIL	NYLON 66,V2,NTR,-,20-22 INCH,-	4	
13	AA60-10050R	SCREW-ASSY	WC,HH,+,M5,L31.5,SWRCH18A,ZPC(4	
14	AA03-10030T	CRT-COLOR	-,A48ECR41X02,+380mG,20,90deg	1	
15	3704-001090	SOCKET-CRT	9P,15.24PI,26.5PI,SN,-	1	
16	AA42-10001V	ANT-ROD	-,3S,620mm,BRN,UL/CSA	1	
17	AA64-30713D	CABINET-BACK	-,5085,-,HIPS,V2,BLK,-,-	1	
18	6003-001026	SCREW-TAPTITE	RH,+,B,M4,L15,ZPC(BLK),SWRCH18	4	
19	AA61-20070A	HOLDER-CORD	-,-,PP,V0,BLK,KE-0002	1	

6-4 CK20E3VR5X/NWT



No	Code No	Description	Specification	Q'ty	Remark
1	AA91-10323T	ASSY-CABINET,FRONT	-,503E,(SPK)BK708P MLPG,HIPS HB,BLK	1	
	AA64-31037P	CABINET-FRONT	-,503E,BK708P MLPG(CIS),HIPS,HB,BLK,-,-	1	
1-1	AA63-50319A	GRILLE-WOOFER	-,503E,PA110 3R,SECC-1,T0.5,-,-	2	
1-2	AA64-60404B	INLAY-AV,HEAD	3E,3PIN WHITE,PS,T0.5,-,-,-	1	
1-3	AA64-40431B	WINDOW-REMOCON	-,503E,567B,569B,-,PC,V0,VIOLET,-	1	
1-4	AA64-10670A	KNOB-POWER	-,503E,-,ABS,HB,MET/BROWN	1	
1-5	AA61-60003J	SPRING-CS	-,SUS304,0.5,OD6,H12,N7,-,-,-	1	
1-6	AA63-30192T	COVER-CONTROL	-,503E,ML(CIS),HIPS,HB,KSP213,-,-	1	
1-7	AA64-40432A	INDICATOR-LED	-,503E,-,ACRYL,-,CLEAR,-	1	
1-8	AA64-70123B	BADGE-BRAND	AL,R2000,SILVER,L=50,SAMSUNG,-	1	
1-9	6003-001024	SCREW-TAPTITE	RWH,+,B,M4,L12,ZPC(YEL),SWRCH1	2	
1-10	AA95-90028M	ASSY-PCB,A/V FRONT	-,39,85,66,,SCT13B,AA41-10903A	1	
1-11	AA61-40113A	STOPPER-PCB	501H,HIPS,NTR,HB,-,-	1	
1-12	AA64-10669A	KNOB-CONTROL	-,503E,-,ABS,HB,MET-BROWN	1	
1-13	6003-001019	SCREW-TAPTITE	RH,+,B,M4,L12,ZPC(BLK),SWRCH18	1	
1-14	AA61-40015A	BOSS-CABINET	-,HIPS,HB,NTR,-,-	4	
1-15	AA65-30105A	CLAMP-WIRE	NYLON 66,V2,NTR,15MM,ALL MODEL	1	
1-16	AA91-60268A	ASSY-HOLDER,SPK	-,ABS,HB,3001-001050,150mm,pie	2	
1-17	6002-000522	SCREW-TAPPING	TH,+,2,M4,L15,ZPC(BLK),SWRCH18	4	
1-18	AA91-60303A	ASSY-HOLDER,SPK	-,8ohm6W,R700L350,4P/RBYB,503E	1	
1-19		ASSY-HOLDER,SPK OPTION			
1-20	6003-001019	SCREW-TAPTITE	RH,+,B,M4,L12,ZPC(BLK),SWRCH18	4	
2	AA03-10030T	CRT-COLOR	-,A48ECR41X02,+,380mG,20,90deg	1	
2-1	AA65-30107A	CLAMP-D,COIL	NYLON 66,V2,NTR,-,20-22 INCH,-	4	
2-2	AA60-10050R	SCREW-ASSY	WC,HH,+,M5,L31.5,SWRCH18A,ZPC(4	
3	AA64-31039B	CABINET-BACK	-,503E,-,HIPS,V2,BLK,-,-	1	
3-1	AA42-10001V	ANT-ROD	-,3S,620mm,BRN,UL/CSA	1	
3-2	6003-001026	SCREW-TAPTITE	RH,+,B,M4,L15,ZPC(BLK),SWRCH18	6	
3-3	AA63-30215A	COVER-JACK	-,503E,-,ELASTOMER,HB,BROWN,-,	1	
3-4	AA39-10001G	POWER-CORD	-,KKP-419C,KLCE-2F,2.286m,HOUS	1	

7. Electric Parts List

7-1 CK2085VR5X/BWT (CK2173VR5X AND CK2085VR5X Dissimilar Parts)

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
ASSY-PCB,MAIN(OPT) BUYER : SRSC				ASSY-CRT			
*	AA94-00768A	ASSY-PCB,MAIN(OPT);CK2085VR5X/BWT,S15A,RUSSIA	△	AA03-10030T CRT-COLOR;- ,A48ECR41X02,+380mG,20,90deg			
C409	2306-000253	C-FILM,MPPF:7.2nF,5%,1.6KV,TP,28.5x18.5x12		ASSY-SPEAKER			
C410	2201-000984	C-CERAMIC,DISC:680pF,10%,2KV,Y5P,TP,11x6,7.5mm		3001-000191 SPEAKER:3W,8ohm,90dB,180Hz			
CN603	3711-002643	CONNECTOR-HEADER:BOX,4P,1R,2.5mm,STRAIGHT,SN		AA39-20505M LEAD CONNECTOR-ASSY;- ,YSH025-04,REC,4P,350,700mm			
CN802	AA27-20003Y	COIL-DEGAUSSING;- ,20',200HM,35T,L2170,E					
D803	0402-000430	DIODE-RECTIFIER:FML-G02S,200V,3.0A,TO-220F,BK					
R301	2004-001983	R-METAL(S);2.49Kohm,1%,1/2W,AA,TP,2.4x6.4					
R305	2001-001048	R-CARBON(S);1.20HM,5%,1/2W,AA,TP,2.4X6.4MM					
R610	2001-000331	R-CARBON:12KOHM,5%,1/8W,AA,TP,1.8X3.2MM					
R611	2001-000723	R-CARBON:4.3KOHM,5%,1/8W,AA,TP,1.8X3.2MM					
R815	2008-001002	R-FUSIBLE(S);0.18ohm,5%,2W,AA,TP,3.9x10mm					

7-2 CK2185VR5S/AWT (CK2173VR5X AND CK2185VR5S Dissimilar Parts)

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
ASSY-PCB,MAIN(OPT) BUYER : AWT				ASSY-HOLDER,SPK			
*	AA94-00846A	ASSY-PCB,MAIN(OPT);CK2185VR5S/AWT,S15A,KAZAKHST	△	AA03-100270 CRT-COLOR;- ,A51KQJ63X02(H),+380mG,21,90			
C253	2306-000122	C-FILM,MPPF:100nF,5%,50V,TP,7.3x4.0x5.0mm,		ASSY-PCB,A/V FRONT			
C254	2306-000122	C-FILM,MPPF:100nF,5%,50V,TP,7.3x4.0x5.0mm,		AA91-60028A ASSY-HOLDER,SPK;- ,ABS,-,-,80HM 5W,5085			
C255	2306-000122	C-FILM,MPPF:100nF,5%,50V,TP,7.3x4.0x5.0mm,		ASSY-ACCESSORY			
C611	2301-000445	C-FILM,PEF:4.7nF,5%,50V,TP,5.5x7x3mm,5mm		AA68-11289A MANUAL-USERS:S15A,N-RUSSIA,W/O TTX,B5,W/P 1			
C612	2401-001323	C-AL:470nF,20%,50V,BP,TP,5x11.5mm		ASSY-CABINET;5385,CK2185VR5S/AWT			
C704	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP,1.9x3.5,-		* AA91-10403H ASSY-CABINET,FRONT;- ,5385,BK708P MLH,HB,BLK			
CN602	3711-002643	CONNECTOR-HEADER:BOX,4P,1R,2.5mm,STRAIGHT,SN		AA64-31262K CABINET-FRONT;- ,5385,BK708P MLH,HIPS,HB,BLK,-,-			
CN701	3711-000628	CONNECTOR-HEADER;- ,11P,1R,2.5mm,STRAIGHT,-		AA64-30638D CABINET-BACK;- ,5385,-,HIPS,V2,BLK,-,-			
D701	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP		* AA95-90028M ASSY-PCB,A/V FRONT;- ,39,85,66,-,SCT13B,AA41-10903A			
D701	0402-000430	DIODE-RECTIFIER:FML-G02S,200V,3.0A,TO-220F,BK		* AA39-20461C LEAD CONNECTOR-ASSY;- ,YBNH250-11,67096-011,11,300,			
DZ701	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,		ASSY-ACCESSORY			
DZ702	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,		AA68-11289A MANUAL-USERS:S15A,N-RUSSIA,W/O TTX,B5,W/P 1			
DZ703	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,		ASSY-CABINET;5385,CK2185VR5S/AWT			
DZ705	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,		* AA91-10403H ASSY-CABINET,FRONT;- ,5385,BK708P MLH,HB,BLK			
△ IC602	1201-000537	IC-AUDIO AMP:7057,ZIP,13P,-,DUAL,40dB,PLAST		AA64-31262K CABINET-FRONT;- ,5385,BK708P MLH,HIPS,HB,BLK,-,-			
JS701	3722-000183	JACK-SCART:21P,4mm,SN,BLK,NO		AA64-30638D CABINET-BACK;- ,5385,-,HIPS,V2,BLK,-,-			
L704	2701-000184	INDUCTOR-AXIAL:4.7uH,10%,2.5x3.4mm		* AA95-90028M ASSY-PCB,A/V FRONT;- ,39,85,66,-,SCT13B,AA41-10903A			
Q703	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,TP,120-		* AA39-20461C LEAD CONNECTOR-ASSY;- ,YBNH250-11,67096-011,11,300,			
R605	2001-000563	R-CARBON:27KOHM,5%,1/8W,AA,TP,1.8X3.2MM		ASSY-ACCESSORY			
R606	2001-000723	R-CARBON:4.3KOHM,5%,1/8W,AA,TP,1.8X3.2MM		AA63-50010A GRILLE-WOOFER;- ,5385,PA110 P11.0 GOJUPA,SECC			
R610	2001-000563	R-CARBON:27KOHM,5%,1/8W,AA,TP,1.8X3.2MM		* AA91-10403H ASSY-CABINET,FRONT;- ,5385,BK708P MLH,HB,BLK			
R611	2001-000723	R-CARBON:4.3KOHM,5%,1/8W,AA,TP,1.8X3.2MM		AA64-31262K CABINET-FRONT;- ,5385,BK708P MLH,HIPS,HB,BLK,-,-			
R703	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		AA64-30638D CABINET-BACK;- ,5385,-,HIPS,V2,BLK,-,-			
R705	2001-000003	R-CARBON:330OHM,5%,1/8W,AA,TP,1.8X3.2MM		* AA95-90028M ASSY-PCB,A/V FRONT;- ,39,85,66,-,SCT13B,AA41-10903A			
R713	2001-000812	R-CARBON:5.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM		* AA39-20461C LEAD CONNECTOR-ASSY;- ,YBNH250-11,67096-011,11,300,			
R814	2008-001073	R-FUSIBLE(S);0.68ohm,5%,2W,AA,TP,3.9x10mm		ASSY-ACCESSORY			
R815	2008-001073	R-FUSIBLE(S);0.68ohm,5%,2W,AA,TP,3.9x10mm		AA68-11289A MANUAL-USERS:S15A,N-RUSSIA,W/O TTX,B5,W/P 1			
RW701	2011-001133	R-NETWORK:33K/24K/75x3.5%,1/8W,X,SIP,6P,		ASSY-CABINET;5385,CK2185VR5S/AWT			
TU01	AA40-10006Q	TUNER-V/S,TELE4-125A,PAL-B/G,TR,181CH		* AA91-10403H ASSY-CABINET,FRONT;- ,5385,BK708P MLH,HB,BLK			
ASSY-CRT				* AA64-31262K CABINET-FRONT;- ,5385,BK708P MLH,HIPS,HB,BLK,-,-			

7-4 CK20E3VR5X/NWT (CK2173VR5X AND CK20E3VR5X Dissimilar Parts)

7-2 Samsung Electronics

7-5 CK2073XR5X/VWT (CK2173VR5X AND CK2073XR5X Dissimilar Parts)

Loc. No.	Code No.	Description ; Specification	Remark
ASSY-PCB,MAIN(OPT)			
BUYER : SESPO			
*	AA94-00667A	ASSY-PCB,MAIN(OPT);CK2073XR5X/VWT,S15A,LITHUANIA,	
C227	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5	
C253	2306-000122	C-FILM,MPPF:100nF,5%,50V,TP,7.3x4.0x5.0mm,	
C254	2306-000122	C-FILM,MPPF:100nF,5%,50V,TP,7.3x4.0x5.0mm,	
C255	2306-000122	C-FILM,MPPF:100nF,5%,50V,TP,7.3x4.0x5.0mm,	
C409	2306-000253	C-FILM,MPPF:7.2nF,5%,1.6KV,TP,28.5x18.5x12	
C410	2201-000984	C-CERAMIC,DISC:680pF,10%,2KV,Y5P,TP,11x6,7.5m	
C908	2201-000980	C-CERAMIC,DISC:30pF,5%,50V,CH,TP,5.0x3.0,5mm	
C909	2201-000980	C-CERAMIC,DISC:30pF,5%,50V,CH,TP,5.0x3.0,5mm	
C916	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm	
C928	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-5mm	
CN802	AA27-20003Y	COIL-DEGAUSSING:-,20',200HM,35T,L2170.E	
CT01	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.	
CT02	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.	
CT03	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5	
CT04	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.	
CT05	2202-000791	C-CERAMIC,MLC-AXIAL:150pF,10%,50V,Y5P,TP,3.5x19,-	
CT06	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.	
CT07	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5	
D903	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP	
D905	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
D910	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP	
D911	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP	
DT01	2001-000252	R-CARBON:1.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
DT02	2001-000252	R-CARBON:1.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
DT03	2001-000252	R-CARBON:1.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ806	0403-000355	DIODE-ZENER:UZ5.1BSB,5.1V,4.97-5.18V,500mW	
DZ902	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW	
IC802	1203-000644	IC-POS.FIXED REG.:7630,SIP,10P,-,PLASTIC,5.1/8V,	
IC901	AA13-30019HC-MCU:-,SPM-175ER(097),8BIT,SDIP,CK5385T,52P,600MIL		
J149	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
J175	2001-000857	R-CARBON:560OHM,5%,1/8W,AA,TP,1.8X3.2MM	
J176	2001-000857	R-CARBON:560OHM,5%,1/8W,AA,TP,1.8X3.2MM	
J178	2001-000857	R-CARBON:560OHM,5%,1/8W,AA,TP,1.8X3.2MM	
LT01	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP,-	
LT02	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP,-	
LT03	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
Q251	0501-002183	TR-SMALL SIGNAL:KTC9014,NPN,625mW,TO-92,TP,100	
Q902	0501-002183	TR-SMALL SIGNAL:KTC9014,NPN,625mW,TO-92,TP,100	
QT02	0501-002183	TR-SMALL SIGNAL:KTC9014,NPN,625mW,TO-92,TP,100	
QT03	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP	
R205	2001-000793	R-CARBON:47OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R220	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R250	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R301	2004-001983	R-METAL(S):2.49Kohm,1%,1/2W,AA,TP,2.4x6.4	
R305	2001-001048	R-CARBON(S):1.20HM,5%,1/2W,AA,TP,2.4X6.4MM	
R820	2008-001062	R-FUSIBLE:39ohm,5%,2W,AF,TP,3.9x10mm	
R906	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R907	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R908	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R909	2001-000591	R-CARBON:3.3KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R921	2001-001062	R-CARBON(S):10MOHM,5%,1/2W,AA,TP,2.4X6.4MM	
R932	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R933	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R935	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R939	2001-000006	R-CARBON:2.4KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R944	2001-000006	R-CARBON:2.4KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R958	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R959	2001-000800	R-CARBON:5.1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RT01	2001-000563	R-CARBON:27KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RT02	2001-000577	R-CARBON:2KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RT03	2001-000252	R-CARBON:1.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RT04	2008-001062	R-FUSIBLE:39ohm,5%,2W,AF,TP,3.9x10mm	
RT05	2001-000864	R-CARBON:56KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RT06	2001-000362	R-CARBON:150OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RT07	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RT08	2001-000003	R-CARBON:330OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RT09	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM	

Loc. No.	Code No.	Description ; Specification	Remark
RT13	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RW701	2011-001133	R-NETWORK:33K/24K/75x3,5%,1/8W,X,SIP,6P,	
RW901	2011-000531	R-NETWORK:4.7KOHM,5%,1/8W,A,SIP,8PBK	
TU01	AA40-10006Q	TUNER-V/S:TELE4-125A,PAL-B/G,TR,181CH	
X901	2801-001476	CRYSTAL-UNIT:12.0MHz,50ppm,28-ABQ,S,30ohm,T	

ASSY-CRT



AA03-10030T CRT-COLOR:-,A48ECR41X02,+380mG,20,90deg

REMOCON

*

AA59-10107C REMOCON:-,TM59,SS,SPM175EP,29,-,-,L/GR

ASSY-CABINET;5073,CK2073XR5X/VWT

*

AA91-10340T ASSY-CABINET,FRONT:-,5073,(SPK)MLG,HB,BLK
 AA64-00233A CABINET-FRONT:-,5073,BK708P MLG,HIPS,HB,BLK,-,-
 AA64-30375D CABINET-BACK:-,5038.73,-,HIPS,V2,BLK,-,-
 AA63-50095A GRILLE-WOOFER:-,5073,PA110 P10.6,SECC,TO.5,-
 AA64-10039A KNOB-CONTROL:-,5073,-,ABS,HB,BLK
 AA64-10131A KNOB-POWER:-,5073,-,ABS,HB,BLK
 AA64-40044B WINDOW-REMOCON:-,5073,-,PC,V0,VIOLET,-
 AA64-40182A INDICATOR-LED:-,5073,-,ACRYL,-,-,-

ASSY-ACCESSORY

AA68-11260B MANUAL-USERS:S15A,RUSSIAN,1 COLOR,B5,W/P 100(G)

7-6 CK2173VR5X Parts List

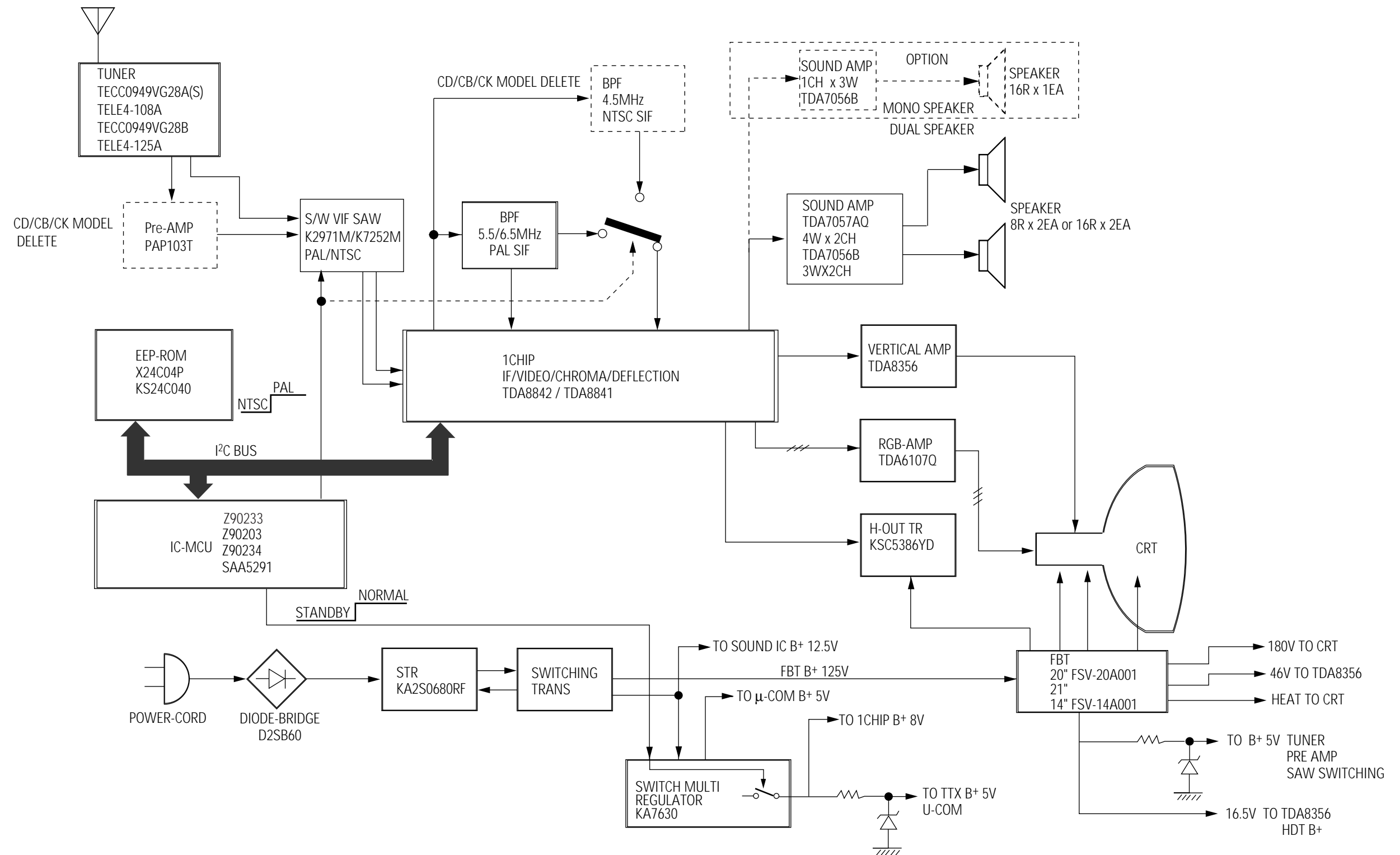
Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
ASSY-PCB,MAIN(OPT) BUYER : SRSC				C604	2401-001323	C-AL:470nF,20%,50V,BP,TP,5x11,5mm	
* AA94-00765A ASSY-PCB,MAIN(OPT);CK2173VR5X/BWT,S15A,RUSSIA				C610	2401-001998	C-AL:1000uF,20%,25V,GP,TP,10x20,5mm	
C101	2401-000030	C-AL:22uF,20%,25V,GP,TP,5x11,5		C613	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3.5X1.9MM,-	
C102	2401-001082	C-AL:330nF,20%,50V,GP,TP,5x11,5		C614	2202-000210	C-CERAMIC,MLC-AXIAL:270pF,10%,50V,Y5P,TP,1.9x3.5,7	
C103	2401-001363	C-AL:470uF,20%,16V,GP,TP,10x12.5,5		C702	2202-000263	C-CERAMIC,MLC-AXIAL:470pF,10%,50V,Y5P,TP,3.5x19,-	
C201	2306-000122	C-FILM,MPPF:100nF,5%,50V,TP,7.3x4.0x5.0mm,		C705	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11,5	
C202	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		C706	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11,5	
C203	2401-000660	C-AL:2.2uF,20%,50V,GP,TP,5x11,5		C800	2306-000321	C-FILM,MPPF:470nF,5%,275V,TP,-,22.5	
C204	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5		C801	2401-002213	C-AL:150uF,+30-10%,450V,GP,BK,25x35	
C205	2305-000411	C-FILM,MPEF:470nF,5%,50V,TP,7.3x4.8x5.5mm,		C802	2401-001192	C-AL:33uF,20%,50V,GP,TP,6.3x11,5	
C206	2305-000411	C-FILM,MPEF:470nF,5%,50V,TP,7.3x4.8x5.5mm,		C803	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5m	
C207	2305-000196	C-FILM,MPEF:150nF,5%,63V,TP,-,5mm		C804	2301-000310	C-FILM,PEF:68nF,5%,50V,TP,8.0X8.5X4.0X5.5	
C208	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		C805	2303-000163	C-FILM,PPF:2.2nF,5%,800V,TP,15x13x8.5,7.5	
C209	2202-000849	C-CERAMIC,MLC-AXIAL:18pF,5%,50V,CH,TP,3.5x1.9,-		C806	2201-000446	C-CERAMIC,DISC:3.3nF,20%,400V,Y5U,TP,18x8,10m	
C210	2301-000445	C-FILM,PEF:4.7nF,5%,50V,TP,5.5x7x3mm,5mm		C807	2201-000991	C-CERAMIC,DISC:560pF,10%,2KV,Y5P,TP,13x7,7.5	
C211	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,		C808	2401-000262	C-AL:100uF,20%,160V,HR,TP,16x25,7.5	
C212	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3.5X1.9MM,-		C809	2401-002290	C-AL:47uF,20%,160V,GP,TP,13x20,5	
C213	2201-000273	C-CERAMIC,DISC:18pF,5%,50V,CH,TP,5x3mm,5		C810	2201-000991	C-CERAMIC,DISC:560pF,10%,2KV,Y5P,TP,13x7,7.5	
C214	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5mm		C811	2401-003141	C-AL:2200uF,20%,25V,WT,TP,13x25,5mm	
C215	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm		C814	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm	
C216	2305-000289	C-FILM,MPEF:220nF,5%,63V,TP,-,5mm		C815	2401-002594	C-AL:220uF,20%,16V,GP,TP,8x11,5,5	
C217	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm		C816	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5	
C219	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5		C818	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5	
C221	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP,1.9x3.5,-		C819	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
C222	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5		C901	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
C224	2202-000295	C-CERAMIC,MLC-AXIAL:68pF,5%,50V,SL,TP,3.5x19,-		C902	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3.5X1.9MM,-	
C226	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5m		C904	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3.5X1.9MM,-	
C228	2201-000247	C-CERAMIC,DISC:15pF,5%,50V,CH,TP,5x3,5		C905	2401-001333	C-AL:470nF,20%,50V,GP,TP,5x11,5	
C230	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5		C907	2201-000119	C-CERAMIC,DISC:100nF,+80-20%,50V,Y5V,TP,8x3.5	
C231	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5		C908	2201-000193	C-CERAMIC,DISC:10pF,0.3pF,50V,CH,TP,5x3,5	
C232	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		C909	2201-000193	C-CERAMIC,DISC:10pF,0.3pF,50V,CH,TP,5x3,5	
C238	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5		C910	2306-000122	C-FILM,MPPF:100nF,5%,50V,TP,7.3x4.0x5.0mm,	
C239	2305-000289	C-FILM,MPEF:220nF,5%,63V,TP,-,5mm		C911	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm	
C240	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,		C912	2201-000234	C-CERAMIC,DISC:150pF,5%,50V,CH,TP,9.5x3,5	
C247	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		C913	2301-000108	C-FILM,PEF:1.5nF,5%,50V,TP,6.5x3.0x5.5mm,	
C248	2309-000138	C-FILM,PEF:100nF,5%,50V,TP,20x16x8.5,7.5m		C914	2306-000122	C-FILM,MPPF:100nF,5%,50V,TP,7.3x4.0x5.0mm,	
C249	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5		C915	2306-000122	C-FILM,MPPF:100nF,5%,50V,TP,7.3x4.0x5.0mm,	
C250	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5m		C916	2301-000247	C-FILM,PEF:33nF,5%,50V,TP,8.1x4.5x13mm,5m	
C251	2301-000204	C-FILM,PEF:2.7nF,5%,50V,TP,7.4x3.9x13mm,5		C917	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.	
C252	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm		C919	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3.5X1.9MM,-	
C301	2202-000253	C-CERAMIC,MLC-AXIAL:4.7nF,20%,16V,Y5R,TP,1.9x3.5,7		C920	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5	
C302	2202-000253	C-CERAMIC,MLC-AXIAL:4.7nF,20%,16V,Y5R,TP,1.9x3.5,7		C922	2201-000573	C-CERAMIC,DISC:47pF,5%,50V,CH,TP,6.5x3.0,5	
C303	2401-003028	C-AL:100uF,20%,25V,WT,TP,6.3x11,5		C923	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.	
C304	2401-000903	C-AL:22uF,20%,160V,WT,TP,10x20mm,5m		C924	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.	
C305	2305-000178	C-FILM,MPEF:10nF,5%,100V,TP,-,5mm		C926	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3.5X1.9MM,-	
C306	2305-000285	C-FILM,MPEF:220nF,5%,100V,TP,10.5X5.5X15MM		C927	2201-000573	C-CERAMIC,DISC:47pF,5%,50V,CH,TP,6.5x3.0,5	
C307	2305-000708	C-FILM,MPEF:150nF,5%,100V,TP,16.5x10.3x5.7		CA01	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11,5	
C308	2305-000450	C-FILM,MPEF:56nF,5%,100V,TP,-,5mm		CN501	AA39-20109B	LEAD-CONNECTOR,ASSY:-,YBNH025-08,S,8P500,1007#26	
C401	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm		CN601	3711-002642	CONNECTOR-HEADER:BOX,3P,1R,2.5mm,STRAIGHT,SN	
C402	2201-000599	C-CERAMIC,DISC:560pF,10%,500V,Y5P,TP,7x4,5		CN703	3711-002648	CONNECTOR-HEADER:BOX,9P,1R,2.5mm,STRAIGHT,SN	
C403	2201-000556	C-CERAMIC,DISC:470pF,10%,500V,Y5P,TP,7x4,5		CN802	AA27-20003Z	COIL-DEGAUSSING:-,21",20.5OHM,35T,L2380,E	
C404	2401-001998	C-AL:1000uF,20%,25V,GP,TP,10x20,5mm		CW901	2503-000156	C-NETWORK:100pF,4,20%,50V	
C408	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11,5		D201	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP	
C409	2306-000327	C-FILM,MPPF:6.3nF,3%,1.6KV,TP,28.5x18x10,2		D202	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP	
C410	2201-000983	C-CERAMIC,DISC:1nF,10%,2KV,Y5P,TP,13x6,7.5mm		D205	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP	
C411	2401-000927	C-AL:22uF,20%,250V,GP,TP,13x20,5		D208	2001-000633	R-CARBON:30KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
C413	2305-000382	C-FILM,MPEF:4.7nF,5%,400V,TP,-,5mm		D209	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP	
C414	2301-001065	C-FILM,MPPF:47nF,5%,630V,TP,19x15.5x7,7.5		D210	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP	
C415	2401-000560	C-AL:1uF,20%,160V,GP,TP,6.3x11,5		D211	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP	
C416	2306-000204	C-FILM,MPPF:430nF,5%,400V,TP,26x20.5x12.5,		D213	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP	
C417	2201-000556	C-CERAMIC,DISC:470pF,10%,500V,Y5P,TP,7x4,5		D401	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
C418	2401-000384	C-AL:10uF,20%,100V,GP,TP,6.3x11,5mm		D402	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
C419	2201-000984	C-CERAMIC,DISC:680pF,10%,2KV,Y5P,TP,11x6,7.5m		D403	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
C502	2301-000213	C-FILM,PEF:220nF,5%,250V,TP,21.5x11,7.5		D404	0402-000534	DIODE-RECTIFIER:RG10V,400V,1.2A,DO-201,TP	
C503	2201-002063	C-CERAMIC,DISC:10nF,+80-20%,3KV,Y5V,TP,16x5,7		D405	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
C504	2401-001232	C-AL:4.7uF,20%,250V,GP,TP,10x12.5,5		D406	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
C506	2401-000430	C-AL:10uF,20%,250V,GP,TP,10x16mm,5m		D501	0402-000216	DIODE-RECTIFIER:ERC24-06,600V,1.0A,DO-204	
C601	2202-000210	C-CERAMIC,MLC-AXIAL:270pF,10%,50V,Y5P,TP,1.9x3.5,7		D502	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
C602	2401-000030	C-AL:22uF,20%,25V,GP,TP,5x11,5		D503	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
C603	2301-000445	C-FILM,PEF:4.7nF,5%,50V,TP,5.5x7x3mm,5mm		D504	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
				D800	1405-000187	VARISTOR:750V,1250A,12.5x7mm,TP	
				D801	0402-000102	DIODE-BRIDGE:D2SB60,600V,1.5A,-	
				D802	0402-000540	DIODE-RECTIFIER:RU20A,600V,1.5A,-,TP	
				D804	0402-000213	DIODE-RECTIFIER:ERB12-06,600V,1.0A,DO-41,TP	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
D805	0402-000534	DIODE-RECTIFIER:RG10V,400V,1.2A,DO-201,TP		PC801	0604-001038	PHOTO-COUPLER:TR,130-260%,200mW,DIP-4,ST	
D809	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP		Q201	0501-002183	TR-SMALL SIGNAL:KTC9014,NPN,625mW,TO-92,TP,100	
D810	0402-000216	DIODE-RECTIFIER:ERC24-06,600V,1.0A,DO-204		Q202	0501-002183	TR-SMALL SIGNAL:KTC9014,NPN,625mW,TO-92,TP,100	
D901	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP		Q204	0501-002183	TR-SMALL SIGNAL:KTC9014,NPN,625mW,TO-92,TP,100	
D903	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW,		Q401	0502-001115	TR-POWER:KSC5386,NPN,50W,TO-3PF,ST,8-	
D905	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP		Q402	0501-000369	TR-SMALL SIGNAL:KSC2331-Y,NPN,1W,TO-92L,-,120-	
D906	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP		Q701	0501-002183	TR-SMALL SIGNAL:KTC9014,NPN,625mW,TO-92,TP,100	
D907	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP		Q901	0501-002183	TR-SMALL SIGNAL:KTC9014,NPN,625mW,TO-92,TP,100	
D908	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP		Q903	0501-002183	TR-SMALL SIGNAL:KTC9014,NPN,625mW,TO-92,TP,100	
D910	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		Q904	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP	
D912	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP		Q905	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP	
DA01	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,TP		Q906	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP	
DZ201	0403-000355	DIODE-ZENER:UZ5.1BSB,5.1V,4.97-5.18V,500mW		Q907	0504-000125	TR-DIGITAL:KSR1012,NPN,300mW,47K,TO-92,TP	
DZ202	0403-000551	DIODE-ZENER:MTZ3.9B,3.9V,3.89-4.16V,500mW,		Q908	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP	
DZ203	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,		QA01	0501-002183	TR-SMALL SIGNAL:KTC9014,NPN,625mW,TO-92,TP,100	
DZ204	2001-000812	R-CARBON:5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M		R200	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ205	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,		R201	2001-000005	R-CARBON:390OHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ208	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,		R202	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ301	0403-000660	DIODE-ZENER:MTZ22A,22V,20.15-21.2V,500mW,D		R203	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ302	0403-001039	DIODE-ZENER:MA2560,56V,52-60V,1W,DO-41,TP		R204	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ401	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW,		R207	2001-000008	R-CARBON:15KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ501	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,		R208	2001-000005	R-CARBON:390OHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ502	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,		R209	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
DZ503	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,		R210	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ504	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,		R211	2001-000331	R-CARBON:12KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ704	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,		R212	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ802	0403-000297	DIODE-ZENER:MTZ6.2B,6.2V,5.96-6.27V,500mW,		R213	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ803	1203-001217	IC-POS:ADJUST REG.:431,TO-92,3P,4.58MIL,PLASTIC,2		R214	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ804	2001-001170	R-CARBON(S):6.8KOHM,5%,1/2W,AA,TP,2.4X6.4MM		R215	2001-001015	R-CARBON:9.1KOHM,5%,1/8W,AA,TP,1.8X3.2M	
DZ808	0403-000300	DIODE-ZENER:MTZ8.2B,8.2V,7.78-8.19V,500mW,		R216	2001-000490	R-CARBON:200OHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ809	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW,		R217	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
DZ901	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,		R218	2001-000591	R-CARBON:3.3KOHM,5%,1/8W,AA,TP,1.8X3.2M	
DZ902	2202-000127	C-CERAMIC,MLC-AXIAL:10nF,+80-20%,25V,Y5V,TP,-,7.5		R219	2001-000008	R-CARBON:15KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ903	1203-000451	IC-VOLTAGE REGULATOR:33,TO-92,3P,-,PLASTIC,31/35V,		R221	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ905	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW,		R223	2001-000938	R-CARBON:68OHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ907	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW,		R224	2001-000563	R-CARBON:27KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
DZ909	0403-000551	DIODE-ZENER:MTZ3.9B,3.9V,3.89-4.16V,500mW,		R225	2001-000554	R-CARBON:270OHM,5%,1/8W,AA,TP,1.8X3.2MM	
F801	3601-000261	FUSE-FERRULE:250V,3.15A,TL,GLASS,5.2x20mm		R226	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
F801A	3602-000114	FUSE-HOLDER:-,30mohm		R227	2004-001234	R-METAL:75Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
F801B	3602-000114	FUSE-HOLDER:-,30mohm		R229	2001-000890	R-CARBON:6.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	
F802	3601-001086	FUSE-FERRULE:125V,5A,FA,GLASS,2.4x7.5mm		R230	2001-000793	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
IC201	1204-000140	IC-VIDEO SYSTEM:TDA8842,DIP56P,300MIL,PLASTIC		R231	2001-000563	R-CARBON:27KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
IC301	1204-000441	IC-IF CIRCUIT:TDA8356,SIP,9P,-,PLASTIC,40V,-		R232	2001-000356	R-CARBON:150KOHM,5%,1/8W,AA,TP,1.8X3.2M	
IC501	1201-001159	IC-VIDEO AMP:6107,ZIP,9P,300MIL,SINGLE,-,PL		R234	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
IC601	1201-001147	IC-AUDIO AMP:7056B,SIP,9P,-,SINGLE,41.5dB,P		R236	2003-000634	R-METAL OXIDE(S):3.9Kohm,5%,1W,AA,TP,3.9x9mm	
IC801	1203-001494	IC-PWM CONTROLLER:3S0680RF,TO3PF-5L,5,210,PLASTI		R237	2001-000793	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
IC802	1203-001531	IC-POS:FIXED REG.:7630,SIP,10P,-,PLASTIC,5.1/8V,		R240	2001-000832	R-CARBON:510OHM,5%,1/8W,AA,TP,1.8X3.2MM	
IC901	AA13-30021J	IC-MCU:-,SZM-173ER3(R3943),8BIT,ST,SD		R241	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
IC902	1103-001105	IC-EEPROM:24C040,4Kx1BIT,DIP,8P,300MIL,1		R242	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
J181	2001-000539	R-CARBON:24KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R251	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
J185	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		R252	2004-001914	R-METAL:39Kohm,2%,1/8W,AA,TP,1.8x3.5mm	
J5701	3722-000497	JACK-PIN:4P,3.4mm,SN,BLK,-		R262	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
L102	2701-000212	INDUCTOR-AXIAL:68uH,10%,2.8x7mm		R301	2004-000869	R-METAL:3Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
L103	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		R302	2008-001033	R-FUSIBLE(S):10ohm,5%,2W,AF,TP,3.9x10mm	
L202	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm		R303	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
L206	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		R305	2004-001370	R-METAL(S):1.3ohm,1%,1/2W,AA,TP,2.4x6.4mm	
L301	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		R306	2008-000254	R-FUSIBLE(S):0.68ohm,5%,2W,AF,TP,3.9x10mm	
L302	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		R307	2003-001026	R-METAL OXIDE(S):180ohm,5%,2W,AF,TP,3.9x10mm	
L304	2701-000159	INDUCTOR-AXIAL:22uH,10%,4.2x9.8mm		R402	2003-000664	R-METAL OXIDE(S):33ohm,5%,2W,AF,TP,4x12mm	
L305	2701-000116	INDUCTOR-AXIAL:10uH,10%,4.2x9.8mm		R403	2001-001114	R-CARBON(S):270OHM,5%,1/2W,AA,TP,2.4X6.4MM	
L306	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R404	2008-000294	R-FUSIBLE(S):33ohm,5%,2W,AF,TP,3.9x10mm	
L401	AA27-30001B	COIL-LINEARITY:-,195uH,QIC1010,PIO.4,4.5x21.5		R405	2001-001410	R-CARBON(S):430OHM,5%,1/2W,AA,TP,2.4X6.4MM	
L402	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP,-		R406	2001-000037	R-CARBON(S):330OHM,5%,1/2W,AA,TP,2.4X6.4MM	
L601	2701-000146	INDUCTOR-AXIAL:2.2uH,10%,2.5x3.4mm		R407	2001-001037	R-CARBON(S):0.39OHM,5%,1/2W,AA,TP,2.4X6.4M	
L702	2701-000184	INDUCTOR-AXIAL:4.7uH,10%,2.5x3.4mm		R408	2001-000022	R-CARBON(S):33OHM,5%,1/2W,AA,TP,2.4X6.4MM	
L703	2701-000184	INDUCTOR-AXIAL:4.7uH,10%,2.5x3.4mm		R409	2008-000204	R-FUSIBLE(S):0.22ohm,10%,1/2W,AF,TP,2.5x6.5	
L706	2701-000184	INDUCTOR-AXIAL:4.7uH,10%,2.5x3.4mm		R412	2003-000664	R-METAL OXIDE(S):33ohm,5%,2W,AF,TP,4x12mm	
L801	AA29-30001B	FILTER-LINE:-,27mH,-,,-		R413	2003-000784	R-METAL OXIDE(S):7.5Kohm,5%,2W,AF,TP,4x12mm	
L804	3301-000287	CORE-FERRITE BEAD-AA,3.5x1.0x6.0mm,1500,2400G		R414	2003-000540	R-METAL OXIDE(S):1Kohm,5%,2W,AF,TP,4x12mm	
L805	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP,-		R415	2008-000206	R-FUSIBLE(S):1ohm,5%,1/2W,AF,TP,2.5x6.5mm	
L807	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP,-		R416	2008-000277	R-FUSIBLE:68ohm,5%,1/2W,AA,TP,4.7x11mm	
L809	2701-001032	INDUCTOR-AXIAL:100uH,10%,5x14mm		R417	2008-000265	R-FUSIBLE(S):1ohm,5%,2W,AA,TP,3.9x10mm	
L810	2701-001032	INDUCTOR-AXIAL:100uH,10%,5x14mm		R420	2004-001377	R-METAL(S):120Kohm,1%,1/2W,AA,TP,2.4x6.4m	
L902	2701-000189	INDUCTOR-AXIAL:470nH,10%,2.5x3.4mm		R501H	2002-001008	R-COMPOSITION:1.8Kohm,5%,1/2W,AA,TP,3.7x9mm	
L904	2701-000299	INDUCTOR-AXIAL:13uH,10%,2.5x3.4mm		R502H	2002-001008	R-COMPOSITION:1.8Kohm,5%,1/2W,AA,TP,3.7x9mm	
LD901	AA96-30007A	ASSY-LED,GUIDE:-,AA61-50055A,DL-G7GA,GREEN		R503	2002-001008	R-COMPOSITION:1.8Kohm,5%,1/2W,AA,TP,3.7x9mm	
NT801	1404-001075	THERMISTOR-NTC:5ohm,15%,-,17mW/C,TP		R504	2001-001062	R-CARBON(S):10MOHM,5%,1/2W,AA,TP,2.4X6.4MM	
P801	1404-001048	THERMISTOR-PTC:7ohm,30%,200/220V,270V,19A,-,B		R505	2008-001011	R-FUSIBLE(S):0.18ohm,10%,2W,AF,TP,3.9x10mm	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
R510	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		RA03	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R511	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		RA04	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R512	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		RL901	AA59-60001U	MODULE-REMOCON;-;ORC-50VF/SR-12V,38KHz,940nm,	
R603	2001-000241	R-CARBON:1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M		RW702	2011-001098	R-NETWORK:75/75/1K/75OHM,5%,1/8W,-;SIP,5	
R604	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		RX801	2002-001011	R-COMPOSITION:3.3Mohm,10%,1/2W,AA,TP,3.7x9mm	
R610	2001-000347	R-CARBON:13KOHM,5%,1/8W,AA,TP,1.8X3.2MM		SFN02	2904-001063	FILTER-SAW AV:38.9MHz,SIP5K,TP,17dB,PAL-B/G,	
R611	2001-000577	R-CARBON:2KOHM,5%,1/8W,AA,TP,1.8X3.2MM		SW801	3403-000179	SWITCH-PUSH:250V,5A,DPST,-;JPW-2104B	
R701	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		SW901	3404-000244	SWITCH-TACT:15V,20mA,90-170gf,7.5x7mm,SPST	
R702	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		SW902	3404-000244	SWITCH-TACT:15V,20mA,90-170gf,7.5x7mm,SPST	
R706	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M		SW903	3404-000244	SWITCH-TACT:15V,20mA,90-170gf,7.5x7mm,SPST	
R714	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		SW904	3404-000244	SWITCH-TACT:15V,20mA,90-170gf,7.5x7mm,SPST	
R715	2001-000812	R-CARBON:5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M		SW905	3404-000244	SWITCH-TACT:15V,20mA,90-170gf,7.5x7mm,SPST	
R717	2001-000812	R-CARBON:5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M		T401	AA26-50001B	HORIZ.DRIVE;-;7.1mH,102uH,10-20uH,YL081,ST	
R801	2003-000994	R-METAL OXIDE(S):33Kohm,5%,2W,AF,TP,3.9x10mm		T444	AA26-30001Y	TRANS-FLYBACK;-;FSV-20AA001,20,125V	
R802	2003-000994	R-METAL OXIDE(S):33Kohm,5%,2W,AF,TP,3.9x10mm		T801	AA26-200070	TRANS-SWITCHING;-;180-260V,125V/12.5V,EN,EER28	
R803	2001-001178	R-CARBON(S):680OHM,5%,1/2W,AA,TP,2.4x6.4MM		TU01	AA40-10006P	TUNER-V/S;TECC0949VG28B(S),PAL-B/G,TR,18	
R805	2001-001134	R-CARBON(S):360ohm,5%,1/2W,AA,BK,2.4x6.4mm		V999	3704-001090	SOCKET-CRT:9P,15.24PI,26.5PI,SN,-	
R806	2002-001011	R-COMPOSITION:3.3Mohm,10%,1/2W,AA,TP,3.7x9mm		X202	2801-000226	CRYSTAL-UNIT:3.579545MHz,20ppm,28-AAM,15pF,	
R807	2002-001011	R-COMPOSITION:3.3Mohm,10%,1/2W,AA,TP,3.7x9mm		X203	2801-000274	CRYSTAL-UNIT:4.433619MHz,30ppm,28-AAM,20pF,	
R808	2001-000022	R-CARBON(S):330HM,5%,1/2W,AA,TP,2.4x6.4MM		X901	2801-000724	CRYSTAL-UNIT:6MHz,50ppm,28-AAM,20pF,40ohm,T	
R809	2001-000622	R-CARBON:300KOHM,5%,1/8W,AA,TP,1.8X3.2M		Z201	2903-000199	FILTER-CERAMIC:TR,6.5MHz,70KHz,-;,-;TP-	
R810	2003-000527	R-METAL OXIDE(S):18Kohm,5%,2W,AA,TP,4x12mm		Z202	2903-000181	FILTER-CERAMIC:TR,5.5MHz,-;,-;TP,TPS5.5MB-TF	
R811	2001-001134	R-CARBON(S):360ohm,5%,1/2W,AA,BK,2.4x6.4mm		Z204	2903-000184	FILTER-CERAMIC:BP,5.5MHz,+60KHz,6dB,-;TP-	
R812	2003-000455	R-METAL OXIDE(S):100ohm,5%,2W,AA,TP,4x12mm		Z205	2903-000202	FILTER-CERAMIC:BP,6.5MHz,+80KHz,6dB,-;TP-	
R814	2008-000267	R-FUSIBLE(S):2.4ohm,5%,2W,AA,TP,3.9x10mm		Z206	2903-000184	FILTER-CERAMIC:BP,5.5MHz,+60KHz,6dB,-;TP-	
R815	2008-000267	R-FUSIBLE(S):2.4ohm,5%,2W,AA,TP,3.9x10mm		Z210	2903-000200	FILTER-CERAMIC:BP,6.5MHz,+70KHz,6dB,-;TP-	
R816	2004-004089	R-METAL(S):123Kohm,1%,1/2W,AA,TP,2.5x6.5m			AA39-20010D	LEAD-CONNECTOR,ASSY;-;YFH800-01,S,1P,400,1617#22	
R817	2004-001983	R-METAL(S):2.49Kohm,1%,1/2W,AA,TP,2.4x6.4					
R818	2004-001371	R-METAL(S):1.5Kohm,1%,1/2W,AA,TP,2.4x6.4m					
R819	2004-001390	R-METAL(S):1Kohm,2%,1/2W,AA,TP,2.4x6.4mm					
R820	2008-000299	R-FUSIBLE(S):47ohm,5%,2W,AF,TP,3.9x10mm		*	AA95-90027D	ASSY-PCB,A/V FRONT;-;CK5073,SCT13B,CE,9P,-	
R821	2008-000266	R-FUSIBLE(S):1ohm,5%,2W,AF,TP,3.9x10mm		CE01	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
R822	2001-001150	R-CARBON(S):470KOHM,5%,1/2W,AA,TP,2.4x6.4M		CE03	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11,5	
R823	2001-001150	R-CARBON(S):470KOHM,5%,1/2W,AA,TP,2.4x6.4M		CE06	2202-000862	C-CERAMIC,MLC-AXIAL:390pF,10%,50V,Y5P,TP,3.5x1.9,-	
R824	2001-001134	R-CARBON(S):360ohm,5%,1/2W,AA,BK,2.4x6.4mm		CE07	2202-000222	C-CERAMIC,MLC-AXIAL:3.3nF,20%,16V,Y5P,TP,-;7.5	
R825	2003-001040	R-METAL OXIDE(S):47Kohm,5%,2W,AF,TP,3.9x10mm		CN702	AA39-20112E	LEAD-CONNECTOR,ASSY;-;YBNH025-09,67096-009,9P,300,	
R901	2001-000832	R-CARBON:510OHM,5%,1/8W,AA,TP,1.8X3.2MM		JA702	3722-000506	JACK-RCA:2P,3.6mm,-;AG	
R902	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		JE601	3722-000143	JACK-PHONE-1P(VER),3.4mm,AG,BLK,NO	
R903	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		LE01	2701-000158	INDUCTOR-AXIAL:22uH,10%,2.5x3.4mm	
R904	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		QE01	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,T0-92,TP,120-	
R905	2001-000241	R-CARBON:1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M		RE01	2001-001153	R-CARBON(S):47OHM,5%,1/2W,AA,TP,2.4x6.4MM	
R906	2001-000472	R-CARBON:2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		RE02	2001-001153	R-CARBON(S):47OHM,5%,1/2W,AA,TP,2.4x6.4MM	
R907	2001-000995	R-CARBON:820OHM,5%,1/8W,AA,TP,1.8X3.2MM		RE03	2001-000010	R-CARBON:68KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R908	2001-000232	R-CARBON:1.3KOHM,5%,1/8W,AA,TP,1.8X3.2M		RE04	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R909	2001-000605	R-CARBON:3.6KOHM,5%,1/8W,AA,TP,1.8X3.2M		RE05	2001-000009	R-CARBON:20KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R910	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM					
R912	2001-000924	R-CARBON:680OHM,5%,1/8W,AA,TP,1.8X3.2MM					
R916	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM					
R917	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM					
R918	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM					
R919	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM					
R920	2001-000864	R-CARBON:56KOHM,5%,1/8W,AA,TP,1.8X3.2MM					
R922	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM					
R923	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM					
R924	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M					
R925	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M					
R926	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM					
R927	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM					
R928	2001-000066	R-CARBON(S):10KOHM,5%,1/2W,AA,TP,2.4x6.4MM					
R929	2004-000253	R-METAL:11Kohm,1%,1/8W,AA,TP,1.8x3.2mm					
R930	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm					
R931	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm					
R934	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M					
R936	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M					
R937	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M					
R938	2001-000472	R-CARBON:2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M					
R940	2001-000660	R-CARBON:33KOHM,5%,1/8W,AA,TP,1.8X3.2MM					
R946	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM					
R947	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM					
R948	2001-000241	R-CARBON:1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M					
R951	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M					
R952	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM					
R954	2001-000006	R-CARBON:2.4KOHM,5%,1/8W,AA,TP,1.8X3.2M					
R956	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM					
R960	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM					
R962	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,1.8X3.2M					
RA01	2001-000924	R-CARBON:680OHM,5%,1/8W,AA,TP,1.8X3.2MM					
RA02	2001-000241	R-CARBON:1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M					

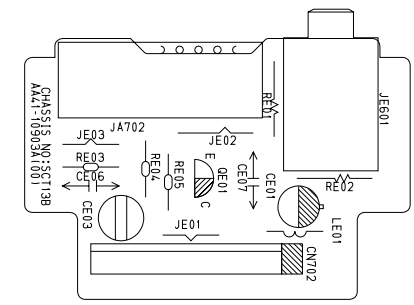
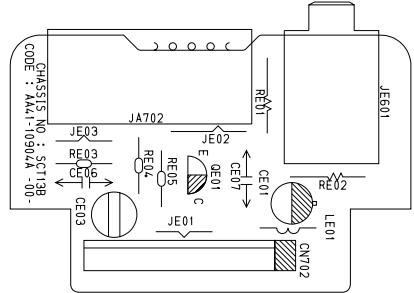
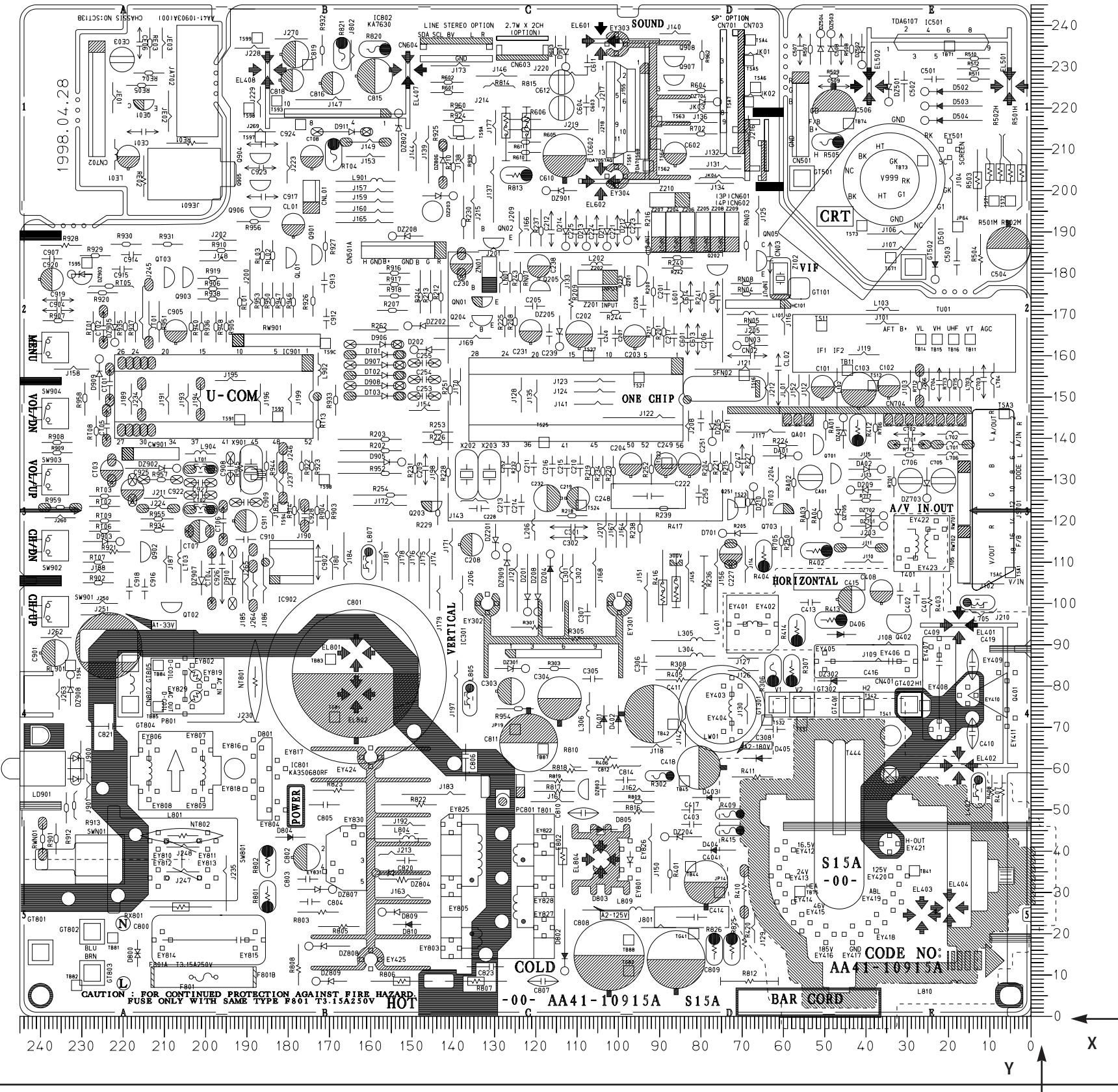
8. Block Diagram

8-1 S15A



10. PCB Layout

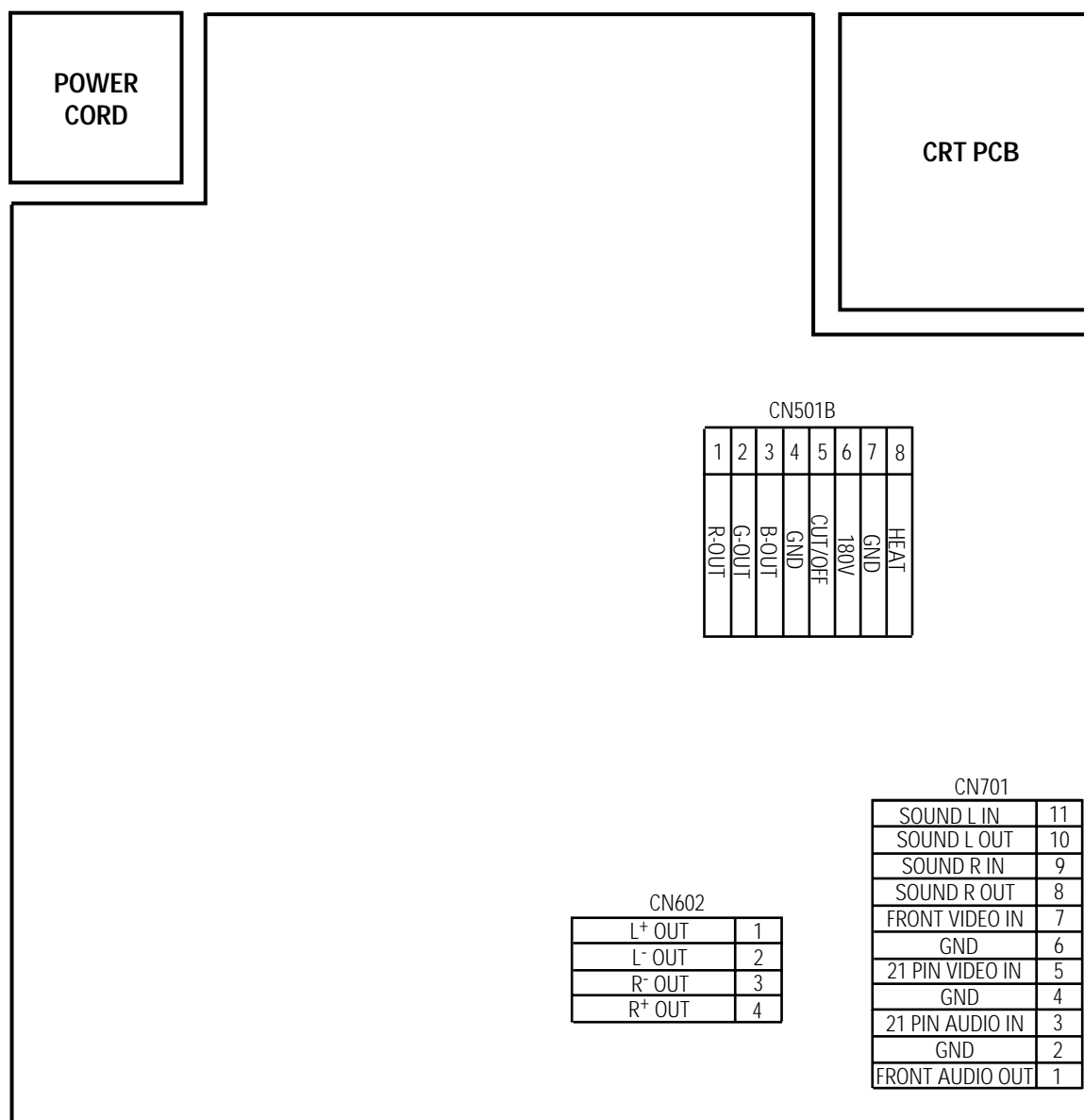
10-1 PCB Main



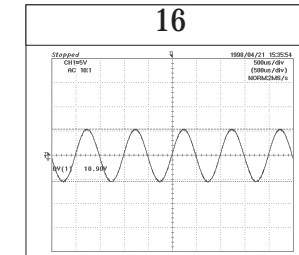
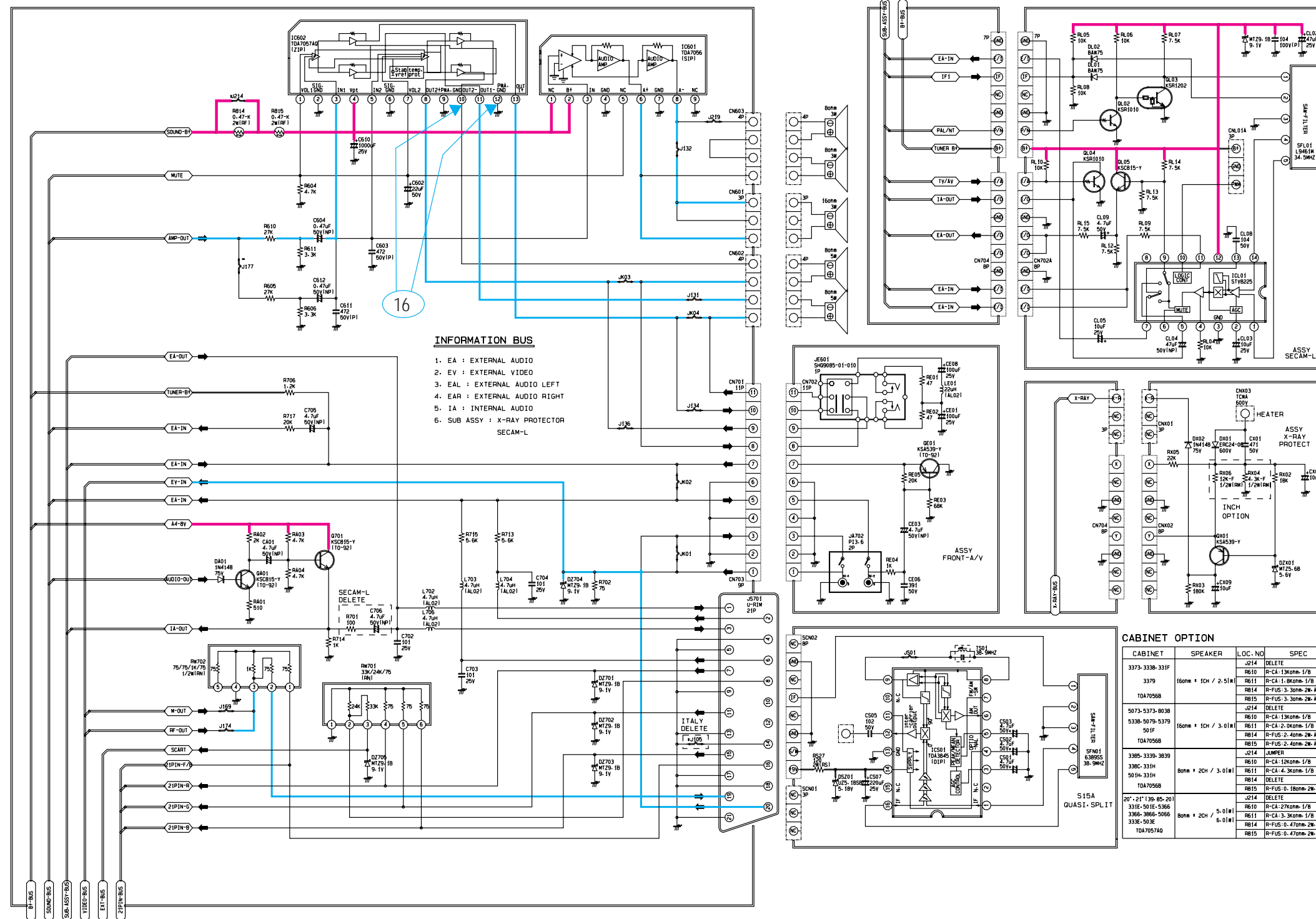
Loc. No.	X	Y	Loc. No.	X	Y
DIODE					
D201	122	98	DZ705	46	118
D202	149	161	DZ802	153	218
D204	116	112	DZ803	107	57
D205	77	139	DZ804	158	34
D208	119	98	DZ806	142	211
D209	43	127	DZ807	169	30
D210	67	128	DZ808	175	17
D211	102	186	DZ809	173	8
D212	97	188	DZ901	117	200
D213	107	186	DZ902	207	132
D214	112	186	DZ903	232	179
D401	103	78	DZ905	222	163
D402	100	78	DZ907	201	100
D403	84	53	DZ908	232	82
D404	83	40	DZ909	127	113
D405	72	62	IC		
D406	39	92	HC101	59	172
D501	23	178	IC201	86	141
D502	25	224	IC301	99	100
D503	25	220	IC501	39	225
D504	25	217	IC602	100	235
D701	74	117	IC801	160	13
D800	216	19	IC802	151	229
D801	188	65	IC901	175	142
D802	113	11	IC902	183	114
D803	104	38	TRANSISTOR		
D805	97	45	Q201	95	176
D809	157	25	Q202	78	182
D810	157	22	Q203	147	124
D901	112	230	Q204	135	169
D903	220	115	Q205	116	175
D905	152	134	Q251	73	120
D906	153	162	Q401	17	94
D907	153	157	Q402	34	95
D908	153	152	Q701	48	129
D909	225	159	Q703	57	121
D910	193	100	Q901	174	182
D911	161	214	Q902	215	110
DA01	56	135	Q903	205	176
DA02	36	132	Q904	189	209
DN03	71	162	Q905	189	202
DT01	153	160	Q906	189	196
DT02	153	155	Q907	89	228
DT03	153	150	Q908	89	232
DZ201	129	111	QA01	52	136
DZ202	151	167	QE01	217	222
DZ203	140	198	QL01	180	181
DZ204	88	43	QN01	135	174
DZ205	114	162	QN02	132	188
DZ208	154	189	QN05	66	180
DZ301	122	84	OT02	210	100
DZ302	54	81	OT03	210	176
DZ401	45	145			
DZ501	34	221			
DZ502	41	230			
DZ503	48	238			
DZ504	51	238			
DZ701	35	118			
DZ702	35	121			
DZ703	25	125			
DZ704	76	221			

10. Wiring Diagram

10-1 S15A

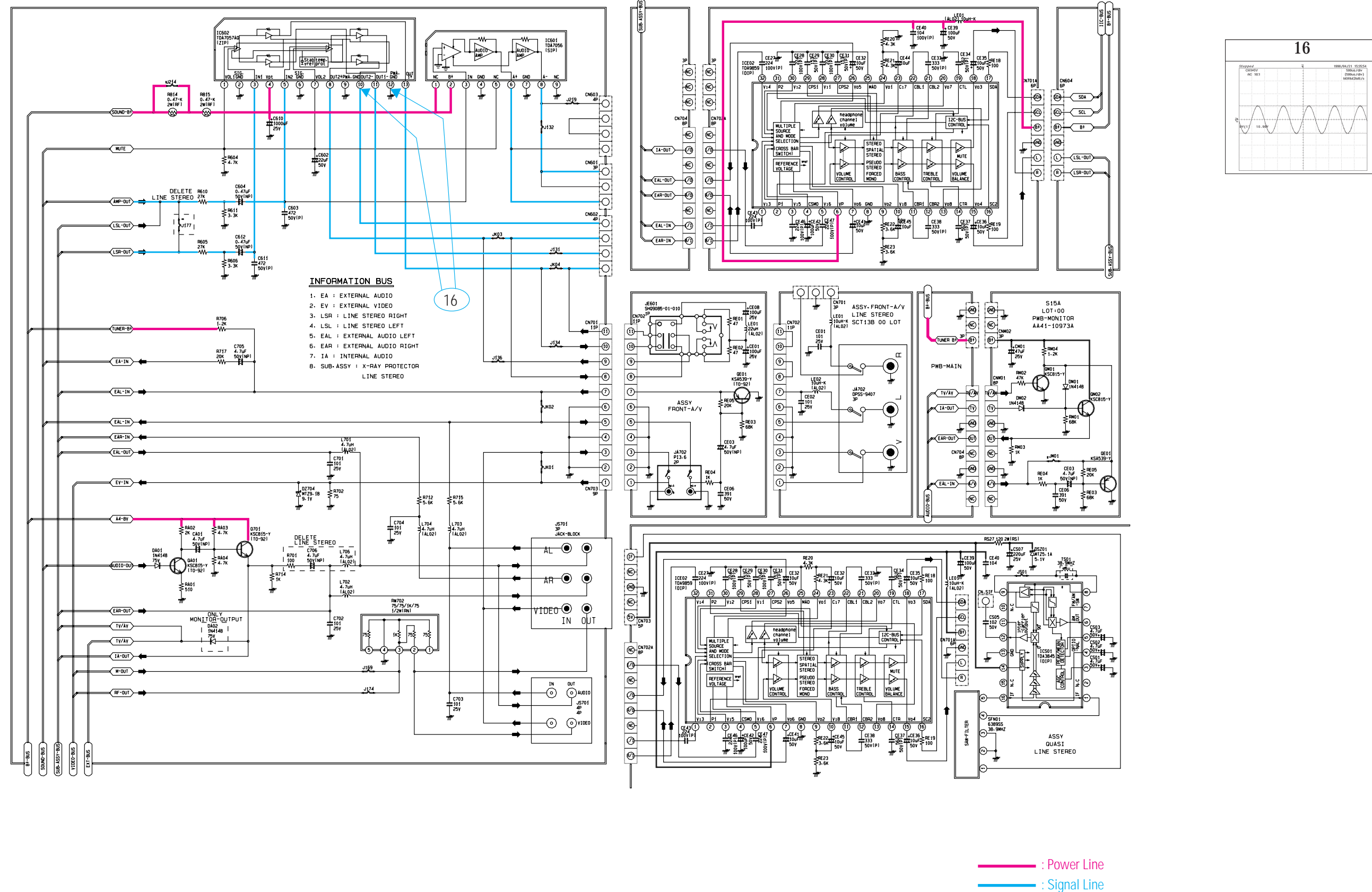


11-2 SOUND, EXT-A/V (Europe/Africa)



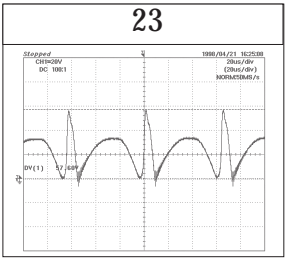
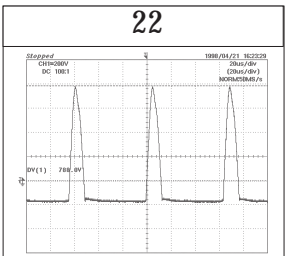
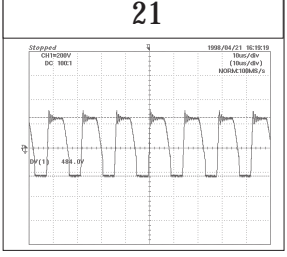
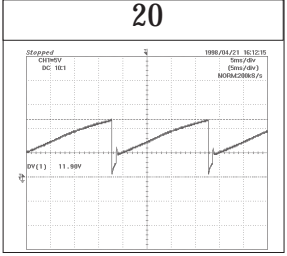
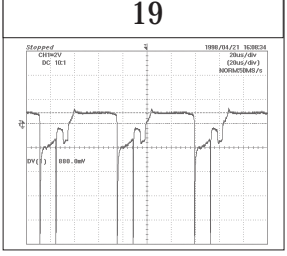
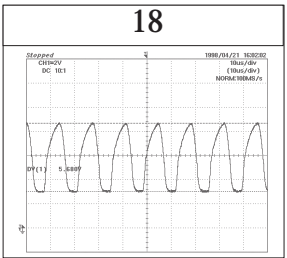
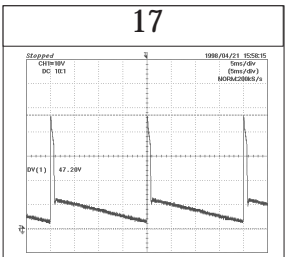
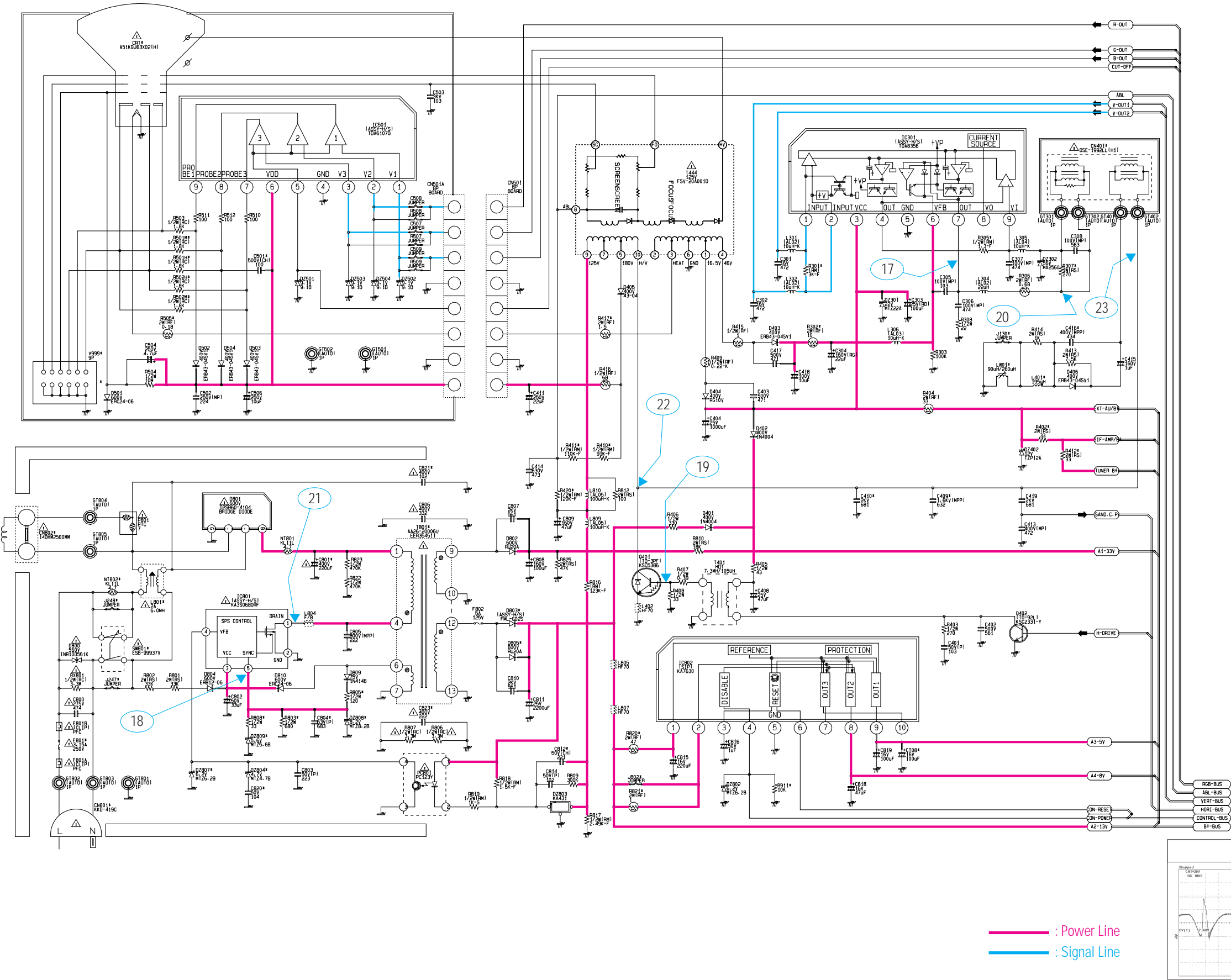
 : Power Line
 : Signal Line

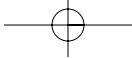
11-3 SOUND, EXT-A/V (Middle East / Asia)



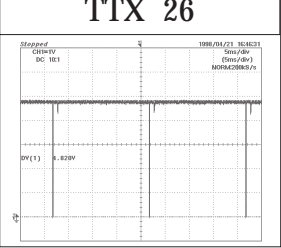
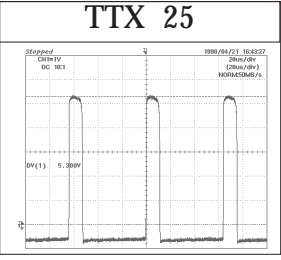
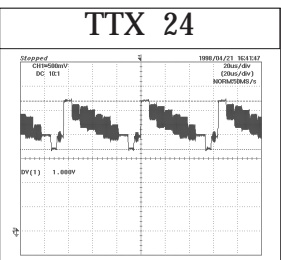
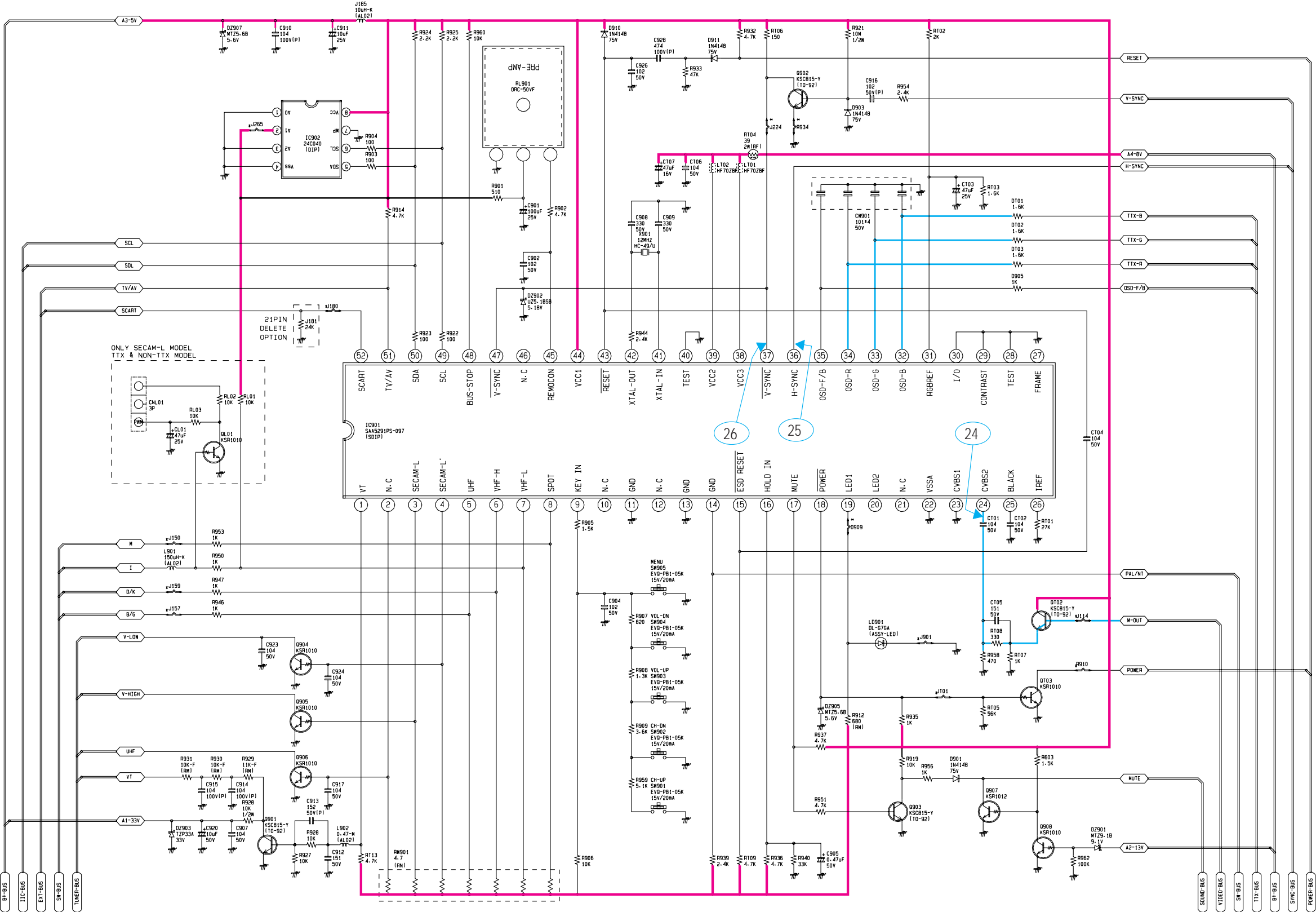
Schematic Diagrams

11-4 POWER / CRT / VERTICAL / HORIZONTAL





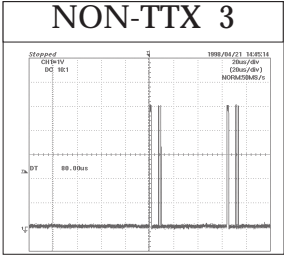
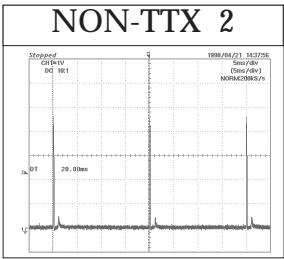
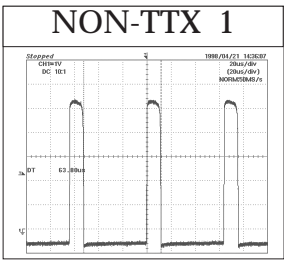
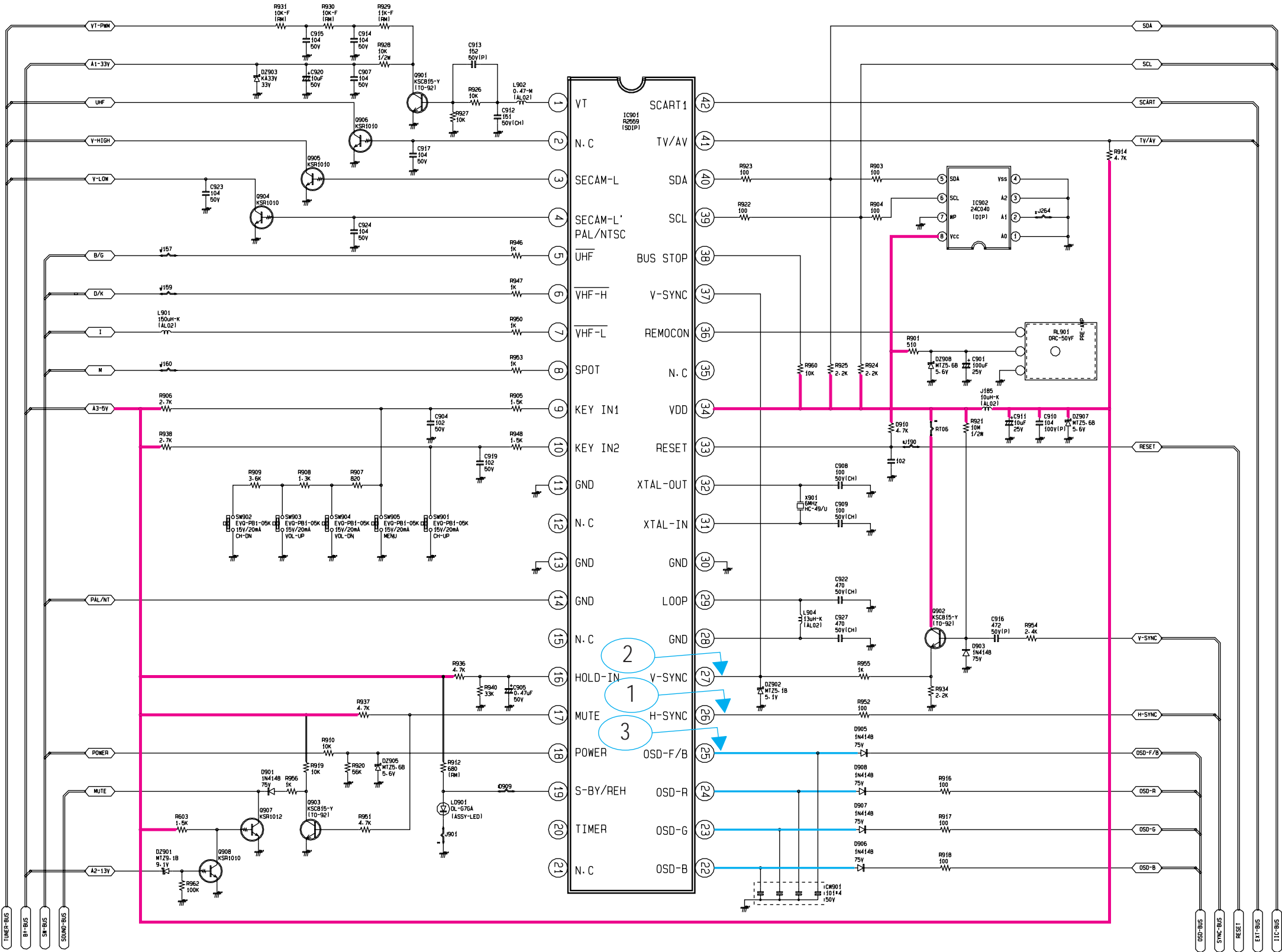
11-5 MICOM (TTX)



Power Line
Signal Line

Schematic Diagrams

11-6 MICOM (NON-TTX)



Power Line
Signal Line